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DUN'S REVIEW

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*British Industry Four Years after the Rockets Productivity
Studies: Planning Guides for Industry . . . The Law and Economics
of Basing Points: II Economic Considerations . . . Business Trends*

TEMPERATURE OF SCHOOL ON AN OCTOBER AFTERNOON, BY HENRY INMAN COURTESY N. Y. PUBLIC LIBRARY See PAGE 5



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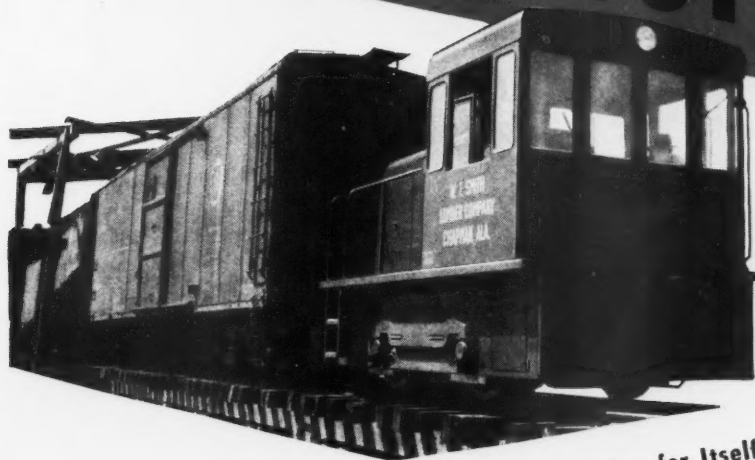


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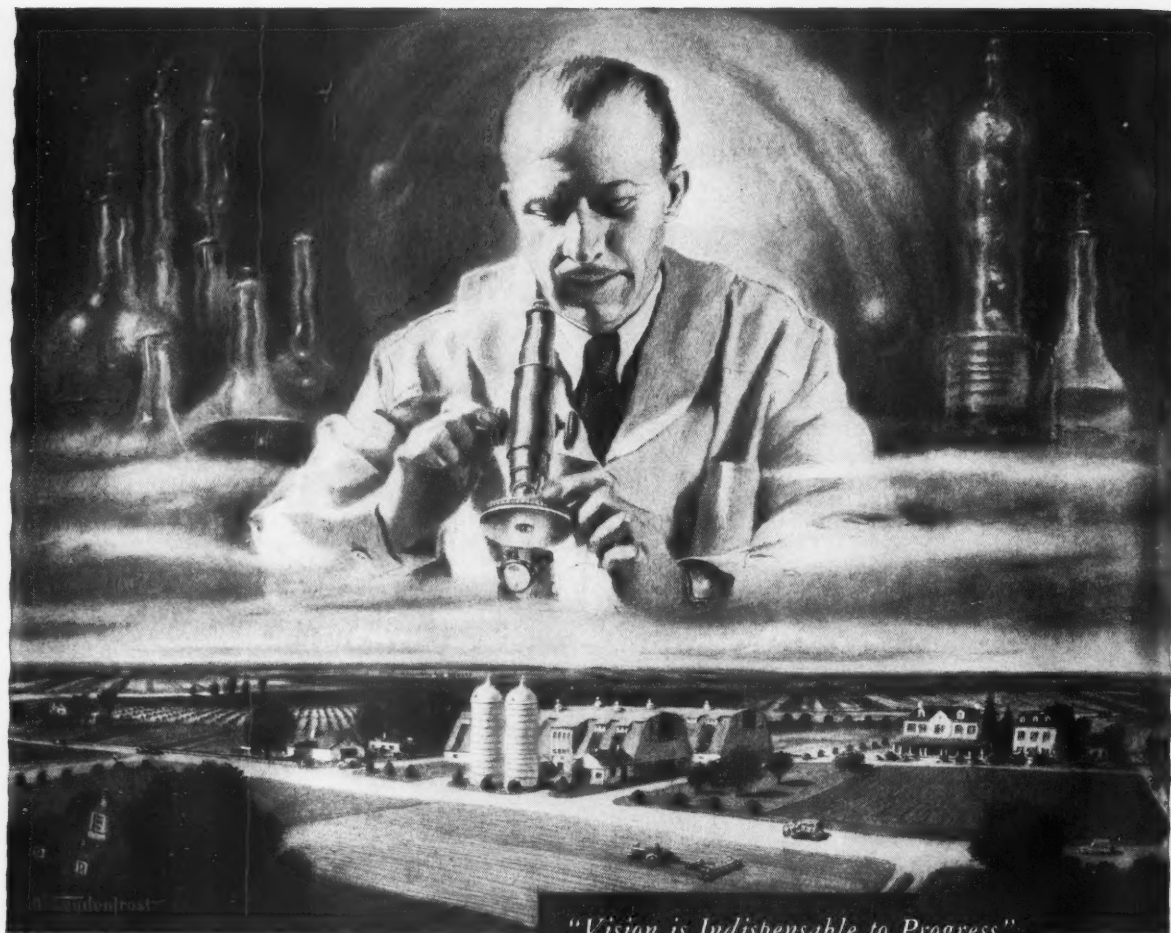
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the highly competitive food industry, where farmer competes with farmer, shipper with shipper, manufacturer with manufacturer, and retailer with retailer, there is the underlying recognition that the improvement of the nation's food and health results in a better life for all. This is typically American.

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BANKERS TRUST COMPANY
NEW YORK

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



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UNITED NATIONS *The long-range possibilities for closer understanding between the "common heritage" nations and Soviet Russia and her satellites, through the opportunities presented by the United Nations, will be discussed in November by Zechariah Chafee, Langdell Professor of Law at Harvard University. Professor Chafee, who participated in United Nations sub-commissions and conferences on freedom of information and of the press, will stress the responsibilities of a free press.*

FAILURES *Two new failure charts prepared by DUN & BRADSTREET may be obtained free on request. One lists all failures for the first six months of 1948 by 9 geographic regions and by 44 divisions of industry. The other covers failures in the manufacturing, wholesaling, and retailing of lumber, furniture, and finished wood products from 1934 through July 1948.*

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Cover

DISMISSAL OF SCHOOL ON AN OCTOBER AFTERNOON

OUR October cover illustration is taken from a painting by Henry Inman dated 1845—over one hundred years ago. Many of us to-day would not have to drive too far into the country to find identical schools with the same romping children splitting the drowsy October stillness with their happy shrieks.

To-day, the boys would not be wearing patent leather peak caps nor the little girls pantaloons but the play pattern would be the same, toy boats, wrestling, dolls, and the wonderful pictures in a new school book.

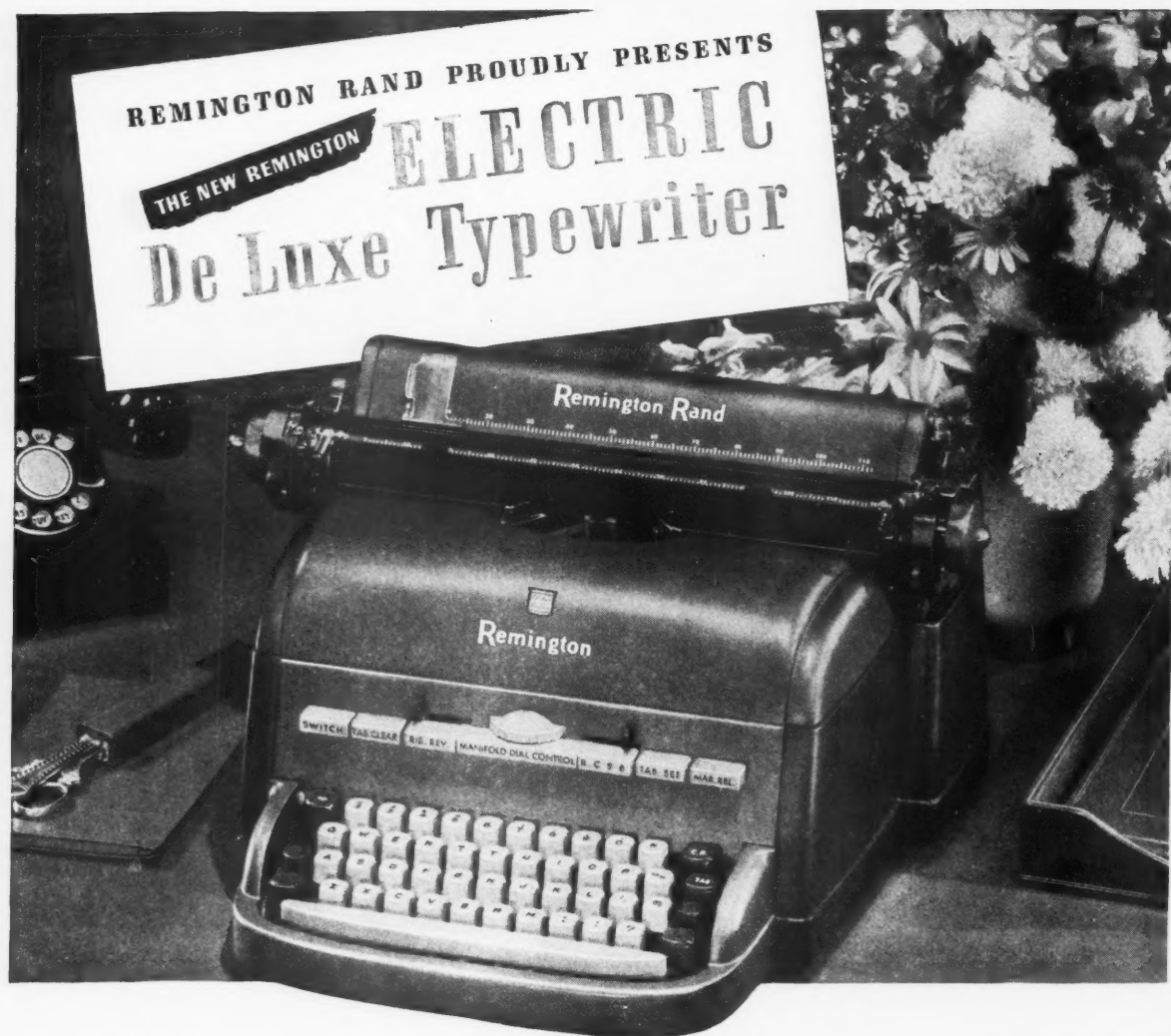
The bridled energy of the school period finds an instant outlet once over the school-house threshold when proper little girls and boys promptly dismiss school from their minds, racing and screaming in unleashed freedom to take up their games where they were

interrupted by the brassy notes of the bell.

Here, in the country school, as in all other schools, children get their first formal introduction to American democracy and respect for authority. Here, they learn to give and take and are taught to appreciate and have the proper regard for the rights of others. Here the simple tables of multiplication, elementary grammar, geography, and history are first met and absorbed, to stay with them all their lives, as the foundation stone upon which their future education is built.

Teachers are the moulders of pliable clay whose greatest reward is, perhaps, the realization of the part they play in the lofty positions achieved in business, science, politics, teaching, and society by many of their early charges.

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and an increase in output that delights the secretary... is a revelation to the executive. The typist need no longer worry about individual touch for beautifully typed letters and reports—with the new Remington Electric DeLuxe she merely touches the keys, and the quiet, smoothly functioning electric mechanism picks up the action and uniform typing appears on paper!

Today, see this handsome new Remington Electric DeLuxe Typewriter... call your nearby Remington Rand office; let a trained representative show you its many features that will give you better typing, faster, at a lower net cost!

The new REMINGTON ELECTRIC DELUXE TYPEWRITER is unusually compact... fits all standard fixed-bed, center-drop and pedestal-style typewriter desks.

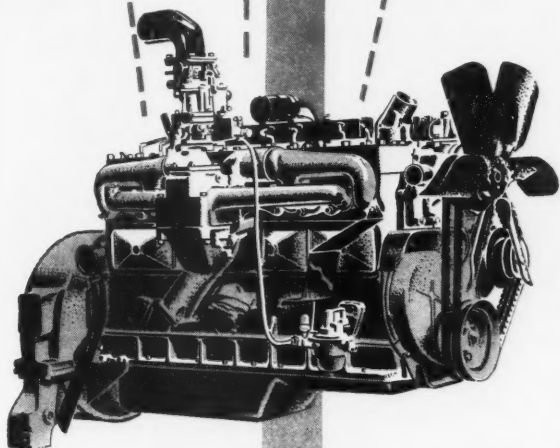
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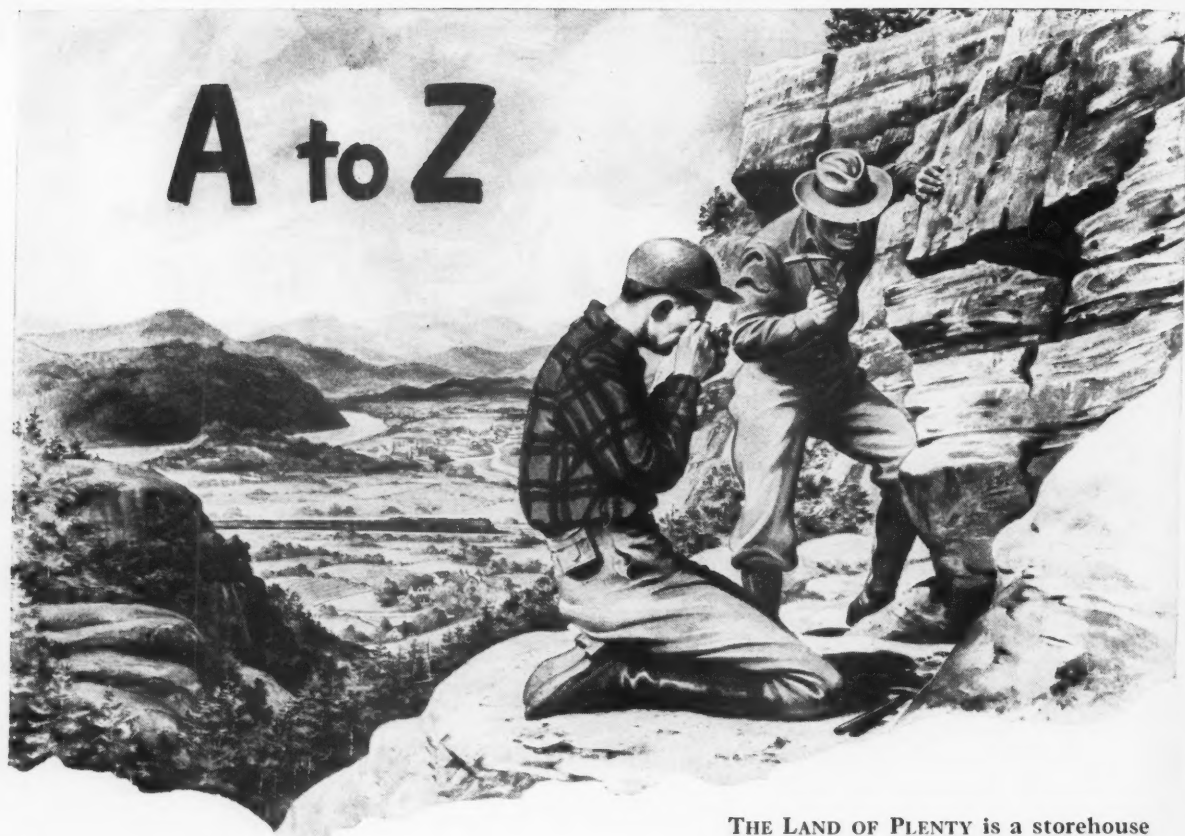
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A to Z



A sbestos and arsenic minerals

B auxite • barite • brines • building stone

C oal • copper • clays • cement material

D olomite • diatomite

F eldspar (soda spar and potash spar)

G ypsum • granite • greensand • greenstone • gravel

I ron ores • hematite, magnetite, limonite

K yanite • kaolin

Limestone • lead ores

Manganese • marble • mica • marl • mineral waters

Natural gas • natural gas gasoline

Ocher • oil shales

Pyrrophyte • petroleum • phosphates

Quartz • quartzite

Salt • silica • sandstone • siderite

Titanium materials • rutile and ilmenite

Unakite • in unique, colorful variety

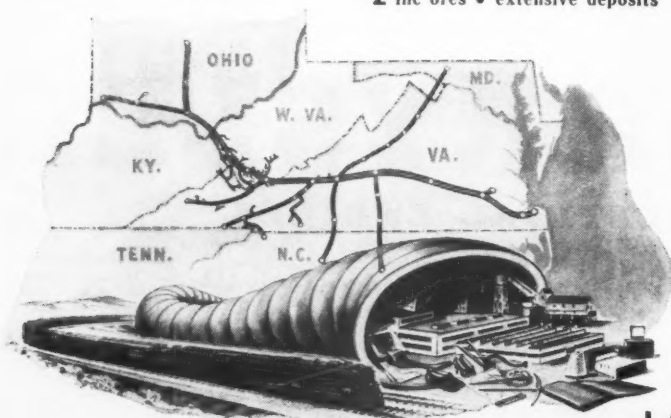
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THE LAND OF PLENTY is a storehouse of industrial minerals . . . from *A to Z*. Their abundance, wide variety and quick availability comprise *one* of the major assets found in the six great states served by the Norfolk and Western Railway . . . assets which create profitable plant locations in this territory.

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Wasps were not only 'way ahead of men in making paper, but they were first with another big idea--paper containers. For the wasp's nest is the forerunner of the millions of paper containers and paper cups that are filled today with ice cream, cottage cheese, potato salad and other fresh prepared foods.

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The bigger the family...

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...the better the service!





POURING PIG IRON INTO AN OVEN AT A STEEL MILL—DEVANEY PHOTOGRAPH

The Law and Economics of Basing Points

II. ECONOMIC CONSIDERATIONS

EDWIN B. GEORGE

*Economist, DUN & BRADSTREET, INC.
Associate Editor, DUN'S REVIEW*

THE prima facie case against basing points is not easy to overturn. Criticism over the years has been virulent, even to the point of permitting some able economists and lawyers to make a life work out of dreams of reform. Typical denunciations are as follows:

"Since all competition at the delivery point must be in salesmanship, greater emphasis must be placed on advertising and other wasteful forms of sales effort."—Comment in *Yale Law Journal*, April 1946.

"The law does not contemplate that prices will be made which cancel out

all the advantages and disadvantages of location and the resulting differences in cost of transportation. . . . I have no enthusiasm about making the price level high enough to permit everybody to sell everywhere. . . . The whole delivered price philosophy makes the freight advantage the sole determinant, which means that all the other advantages consisting of differences in efficiency and management and things of that kind are simply swallowed up. . . ."—Walter Wooden, Associate General Counsel, Federal Trade Commission, on separate occasions.

"Because it contains systematized

phantom freight, because it encourages an increasing imbalance between sources of supply and markets, because it tends to retard appropriate distribution of capital with reference to market location, [many of]* the basing-point systems are peculiarly objectionable."—Dr. Corwin Edwards, now Chief Economist, FTC, in 1947 Edition of *Robinson-Patman Act Symposium*, Commerce Clearing House.

"There is now access for numerous firms to all local markets, with little

* This qualification is injected by the author for the reason that Dr. Edwards has frequently made clear his belief that the right of individuals to absorb freight for the purpose of meeting competition should be preserved.

benefit to buyers."—Government official in unpublished memorandum.

"Stop discrimination in net realized prices by forbidding freight absorption, and you stop the basing-point practise and its monopolistic effects."—Dr. F. A. Fetter, Professor emeritus, Princeton University, *Journal of Political Economy*, October 1937, page 539.

"As economic authorities have held time after time, the economically sound and practical remedy for the basing-point problem is the requirement, well and impartially enforced, of a posted price."—Professor V. A. Mund, University of Washington Economist, *American Economic Review*, December 1937, page 804.

"The respondents' discriminations. . . were established not to meet equally low prices of competitors . . . , but in order to establish elsewhere the artificially high prices whose discriminatory effect permeates respondents' entire pricing system."—Supreme Court in *FTC vs. A. E. Staley Mfg. Co., et al.*

And it is a fact, supported by argument that will be duly recorded, that almost any full-fledged basing-point

scheme would look as though it did not belong in our kind of system. So the critics, now including the Government, have charged that scheme with being discriminatory and extortionate, and argue additionally that it wastes transport facilities, pulls both producing and consuming industries into grotesque geographical patterns, and retards technological progress.

Critics Must Be More Specific

And yet few would regard the sponsors and participants in basing-point systems as Fagins. With unquestioned sincerity the latter argue that this method of pricing is the one naturally adapted to the industries principally under attack—heavy industries making standard products incurring heavy freight charges. Something is wrong here—or at best too involved for casual judgment. The critics must be more specific; a task which apparently gives them no difficulty and little pain.

I. BILL OF PARTICULARS: The major charge is that it is an artificial system of pricing which rests upon tacit or formal collusion among sellers (often

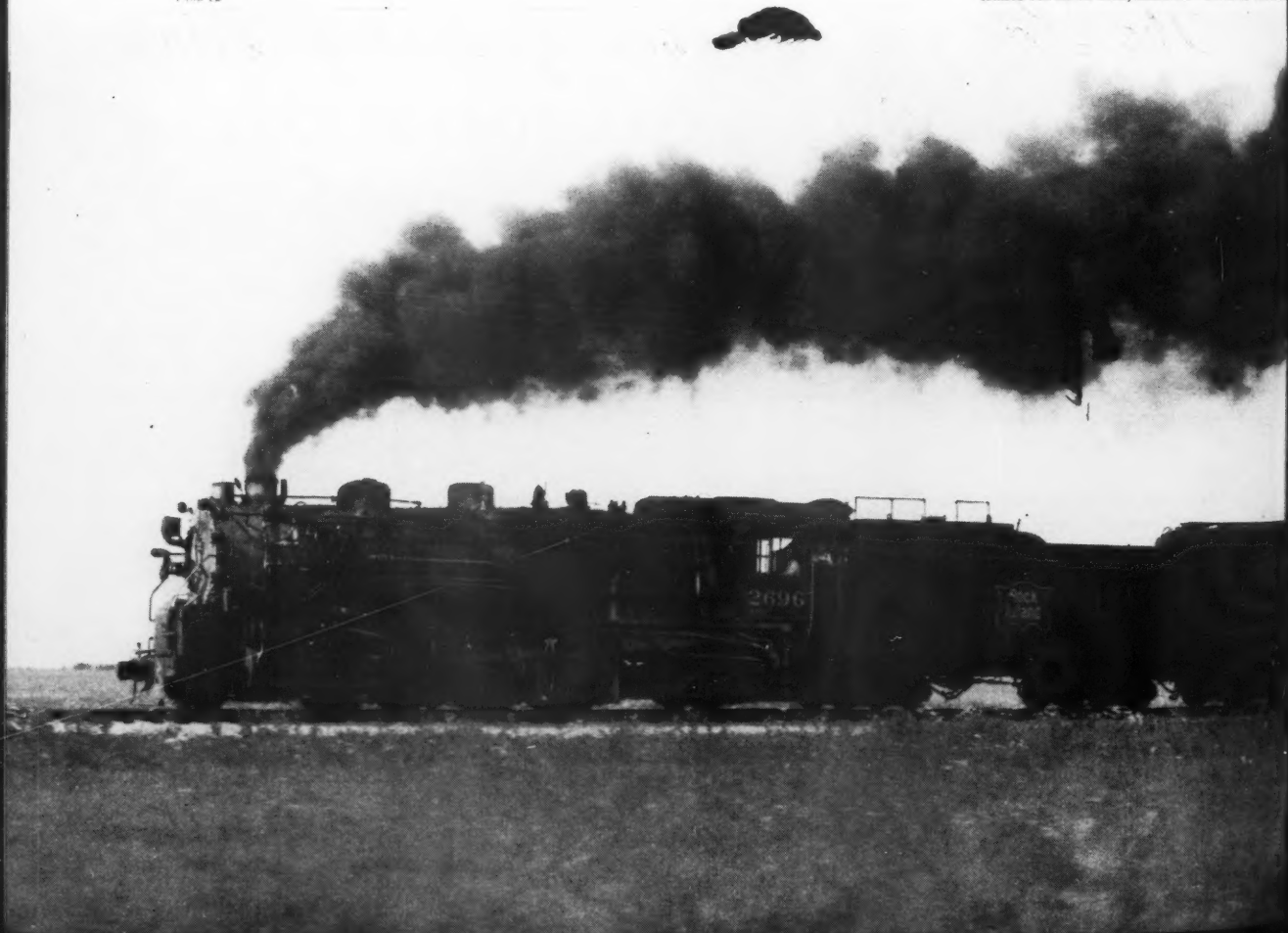
depending upon small producers' fear of retaliatory action against departures from the pricing pattern), with a view to exploiting consumers in what from the technological standpoint could be purely competitive industries. Specifically, the system is held to produce (or to make possible) the following:

1. Serious geographic price discrimination, especially against (a) buyers located contiguous to producing mills, both base and non-base, and (b) buyers situated to use forms of transport less expensive than that taken into account by the system.

2. A higher average level of prices and mill nets than would prevail in a completely free system, or at any rate than in one marked by f.o.b. pricing with uniform mill nets.

3. Relative price stability ("rigidity") under a policy of price leadership—the system markedly facilitating the latter.

4. Very imperfect adjustment of (regional) capacity to markets, involving both checks upon the most desirable location of intermediate consumers and failure of producers adequately to take shifting demand into account in replac-



ing or expanding productive capacity.

5. Prodigious waste of transport facilities, not only for the reason set forth in point 1 (b) above but because of cross-haulage (market interpenetration).

6. Emergence or maintenance of "excess" and obsolete capacity, protected by the umbrella of monopolistic or oligopolistic¹ prices and resulting in a poor distribution of productive resources.

7. Earning of abnormally high (or at least "normal") profits on a capital investment which is inflated owing to the factor mentioned in point 6 and to overcapitalization, financial overheads, and so forth—this, too, being a product of oligopolistic pricing.

Stress Upon Collusion

As said above, these effects are held to follow upon collusive activity to maintain the system. The stress upon collusion results from the need under present law (or at any rate what was felt to be present law until recent Court decisions) to establish that collusion lies at the bottom of the system in order to obtain a Court decision prohibiting its continuance. The position of the Federal Trade Commission, despite the broader and even inviting language of the Court is that the core of the offense in such cases is still collusion.

II. DEFENSE AND SUSPENSE: Replies and countercharges are legion. This article will be confined to summary and brief comment upon the reasoning of economists who either believe that as a rule basing-point systems are in the public interest (namely, benefit not only producers but consumers and third parties) or at least regard the device as giving effect to economic forces whose operation it is desirable to foster and which would be suppressed by the sort of restraint upon it believed widely to be contemplated by the Federal Trade Commission.

On a rather speculative level, economists defending or reserving judgment on industry-wide basing-point systems deny that the existence and persistence of such a setup necessarily implies collusive activity among sellers. Their contentions, to take a few examples, are that (1) in certain conditions it will be to the interest and within the power



GREAT LAKES' FREIGHTER WITH THE TERMINAL TOWER BUILDING, CLEVELAND, OHIO, IN THE BACKGROUND—CUSHING PHOTOGRAPH

of some producers, acting with perfect foresight, to cause others to acquiesce in adopting a basing-point system; (2) the cross-hauling found in the system is itself a proof that collusion, if existing, cannot be complete, since perfection would involve elimination of the cross-haul; and (3) in many cases there is slight evidence of formal collusion and cogent evidence to the contrary.

By and large, however, the economists with whom we are here concerned do not set heavy store by these considerations. They are agreed that the system would often be difficult to maintain rigidly without at least tacit collusion²; that fear of retaliation may be the force keeping some producers in line; and that insofar as concerns collusion the argument that this is tacit rather than formal is a quibble. So elaborate and artificial a method of pricing as one finds in the basing-point approach in, for example, Steel (all rail freights, uniform extras, and so forth) is not likely to arise spontaneously³ (save in circumstances resembling those

to which reference is made above) or be capable of imposition upon other concerns against their basic interests. The real questions, these economists say, concern the economic conditions which the basing-point system reflects. Does it help or hurt efficiency in the utilization of natural resources? And how are its benefits spread among producers, intermediates, consumers, and the economy as a whole taken to represent the public?

At any rate, in order to clear the deck for the issue that surely matters most,

¹ Economists are rather generally agreed that the existence of a dominant point of supply is likely to lead, without collusion and indeed under the spur of hostility, to some kind of basing-point structure. A single strongly entrenched center of production will provide the principal competition for newcomers, who will base their prices upon the price they find. The first American producers of cement quoted the laid down seaboard price plus freight (genuinely phantom, logic hardly disputed). With rising importance, the Lehigh Valley succeeded to the rôle, although mill after mill eventually shook free and became its own base. Over half of the country's cement mills are now independent basing points. In Steel, similarly, "Pittsburgh Plus" gave way to a multiplicity of "pluses." The same course of growth can be traced in many other industries. So far, so good, but the complaint of the more meticulous critics is that having won their freedom the various mills actually re-coalesce through mutual observance of each other's delivered prices. When such a practise goes on for a long time, with few deviations, they are ready to call it collusion. In other words they make degree, duration, and attendant circumstances the issues, rather than basing-point pricing as a method. If one prefers nice legal distinctions, he can phrase it that the effects of identical choices resulting from independent procedures are not distinguishable from those of collusion. The feature that has unnerved business is that it must now guess what new degree, duration, and attendant circumstances may be held to affront the law in dissimilar industries. But for interesting comment on the evolutionary aspect of conspiracy, see Dr. Corwin Edwards in the *Robinson-Patman Act Symposium*, 1947 edition, pages 57 and 58.

² This might mean no more than independent adherence to the system, or a mutual awareness of each others ability or willingness to meet any price move, with no agreement implied. The frequent assumption that concurrent similar action is inherently collusive is one of the sore points in both debates and litigation.

³ Prices determined by a handful of sellers always conscious of the probable reaction of their fellow producers to any initiative in the market.

let us assume imperfections and concern ourselves only with consequences and alternatives. Indeed, understanding may be balked rather than helped by the necessities of legal procedure. Not all restraints are unlawful, but agreements to fix prices are unlawful regardless of whether the purposes or effects are good or bad. The law as interpreted over the years has left us with axioms of this general order. But only answers to such questions as the above, in the judgment of the economists whose views are here under discussion, will permit one to determine (1) whether and in what industries existence of a full-fledged or modified basing-point system would be preferable to feasible alternatives—of which those suggested by various FTC attorneys, commissioners, and economists scarcely exhaust the list; and (2) assuming that modification in existing setups appears desirable, whether this can or should be made either in ways proposed by FTC personnel or by compulsory f.o.b. mill pricing as advocated by some academic opponents of the basing-point practise.

Against this background, the present article will summarize the position taken by professional supporters (or tolerators) of a basing-point system with respect to the first four charges brought against such a pricing method by its opponents. A subsequent article

will deal with the remaining charges, summarize the whole debate, and discuss some concrete alternatives to the system in its usual form other than resort to a uniform f.o.b. mill pricing scheme. For reasons set forth above, the discussion will show little concern over the problem of collusion.

1. *The Charge of Price Discrimination:* Pro-basing-point system economists usually concede that such a device involves discriminatory pricing by firms within the industry—in the sense, that each concern sells a standard product to different customers at prices differing not only absolutely but in relation to production costs, the actual tariff (namely, the mill net) varying inversely with the extent of market penetration.⁴ Moreover, it is admitted that in many cases the system penalizes the trucking and water transport industries and those consumers who are able (or at any rate prefer) to employ such transportation media.⁵ This involves, the defenders agree, full or partial negation of advantage attaching to location along water and land highway routes—some of which have been developed deliberately at the Government's ex-

⁴ The variation is not necessarily proportionate, depending rather upon the structure of transport rates and upon base prices set by other mills (where the latter are not uniform).

⁵ Sometimes the direct burden falls exclusively on consumers. This occurs when the sellers utilize cheaper means of shipment but charge all-rail rates. There have been cases of this sort in Steel. (Indirectly, of course, the more economical methods are penalized to the extent that the higher delivered prices reduce short-term demand and kill the incentive to locate on waterways over the longer-term.)

pense to hasten the economic progress.⁶

In rebuttal, however, supporters make the following claims:

(a) The degree of discrimination is often immensely exaggerated.

(b) The economics of many prominent basing-point industries are such that the mill-net prices to nearer buyers, although above those charged to more distant purchasers, might be well below the level which would prevail for all customers on a uniform f.o.b. mill basis. This contention rests on the assumption that technological economies of volume are achieved through absorption that could not otherwise be realized.⁷

(c) A complementary point: If spatial price discrimination *via* artificial devices like the basing-point system were to go by the boards, there would be a strong tendency for the same sort of thing (together with other forms of price discrimination reflecting principally the relative strength of purchasers) to reappear in the form of variable f.o.b. prices to various groups of customers. The Robinson-Patman Act might have to be dealt with in such event, but not until after tedious and disheartening law suits, and even then successful defenses might be devised that were blocked off by the "collusion" and "injury to competition" angles distinguishing recent cases. A finding by the FTC that competition was being injured by any form of absorption that it chose to attack might eventually invalidate any defense, but such speculations take us into future law.

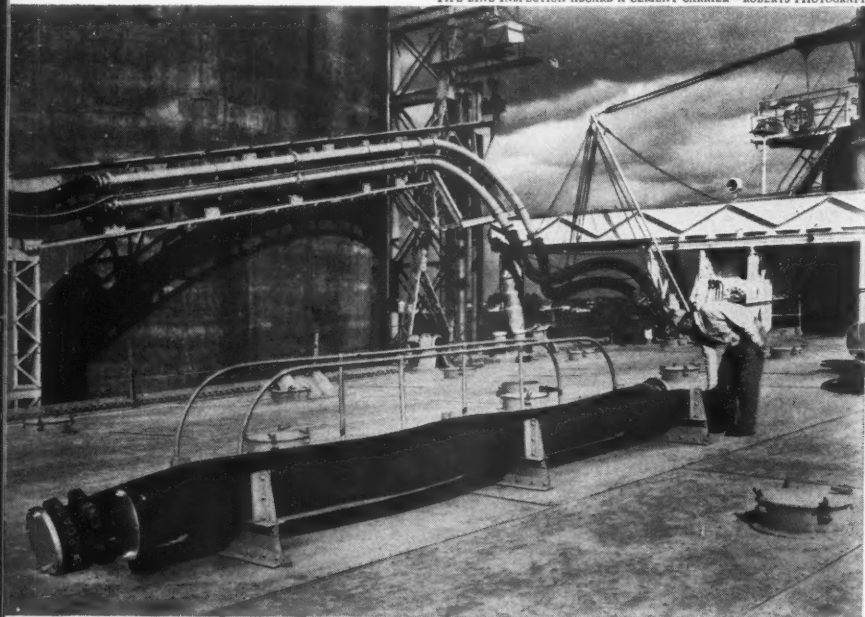
2. *The Problem of Higher Average Level of Prices and Mill Nets:* According to proponents or tolerators, a basing-point system, reflecting as it does monopolistic influences, would doubtless be associated with higher average prices and mill nets than those that a uniform f.o.b. mill price system would yield if pure competition were possible in the industries employing the

⁶ The stiffing effects are sometimes serious. In one major industry, for example, producers initially took advantage of the NRA to compel consumers employing ships or trucks to pay a mill price that equalled the customary base price plus all-rail freight costs from the governing base to destination. This practise, modified during the Code period in the case of trucks to the extent of deducting 65 per cent of the rail rate, persisted on a selective basis during the post-NRA period.

⁷ See, for example, M. G. de Chazeau, "Public Policy and Discriminatory Prices of Steel: a Reply to Prof. Fetter," *Journal of Political Economy*, XLVI, August 1938, p. 548; and A. R. Burns, "The Decline of Competition," *McGraw-Hill*, 1936, p. 331.

(Continued on page 50)

PIPE LINE INSPECTION ABOARD A CEMENT CARRIER—ROBERTS PHOTOGRAPH





BRITISH COMBINE PHOTOGRAPH

Richard, the Lion-Hearted, proudly rode out the Blitz although his upraised sword was bent in a bombing attack. The statue of the famous warrior king is in Court London at the House of Parliament.

British Industry— FOUR YEARS AFTER THE ROCKETS

HARRY B. WARD

*Secretary of the Industrial Management
Research Association of Great Britain*

AS I write, it is Waterloo Sunday, and I well recall exactly four years ago walking from Whitehall towards the Guards' Chapel near Buckingham Palace and seeing black dots in the sky which indicated the bursting of shrapnel near to me following the sound of guns which had just been fired.

A flying bomb was hit, ducked, and fell. I was but a few yards from the Guards' Chapel when it exploded. The whole roof and the sides of the building fell on the congregation, which con-

sisted of representatives of many of the leading families of the country. Only one man remained unburied and that was the Chaplain at the altar. That any escaped alive was remarkable.

The memory of this day causes me to think not only of events of the last four years, but also of the economic events following the battle of Waterloo more than 130 years ago. The country was in desperate condition for many years, but already the industrial revolution had begun and the country de-

veloped apace thereafter. The country reached undreamed of heights of prosperity as the century evolved.

Have we progressed much since 1944? The answer must be, "Not very much." I think of my home. Two of these same doodle bugs fell, one on each side of my house. A top room and a ground floor room were damaged and both have to be rebuilt. In three years, the amount of war damage I have been allowed is 140 pounds done in batches of 50 pound and 90 pound. At the present rate, it



LOADING OF COAL AFTER GRADING—BRITISH COMBINE PHOTOGRAPH

"Coal has now been nationalized for 22 months. . . . In spite of heavy increase in price the loss for last year is fifty cents a ton. . . . Stoppages of work in 1947 after nationalization were twice as great as in 1946."

will be twenty years before my house is in good repair. The 7,000,000,000 pounds of war damage has reduced our efficiency and will be the main cause of inefficiency for some years, for we have not thought out clearly enough what it means. We do not yet realize that whatever happens, it will be a long time before we can obtain pre-war standards.

I constantly visit factories in all parts of the country. Some were sorely blitzed in 1941. Seven years have gone and but little progress in rebuilding has been made—indeed there is no start at all on most buildings. Companies cannot imagine that the new buildings will be in use even five years from now.

During the war we not only produced but cleared up bomb damage at a remarkable rate and got going on essentials. Four years later we do not need to repair the daily damage to railway lines, bridges, roads, and factories. The disorganizing effect of post-war new government schemes of nationalization and much else seem to me, as I reflect, almost as damaging as bombing. Whether the schemes are right or wrong, this is not the right time to introduce so many.

A recent editorial of the *Financial Times* was headed "Slump or Tonic?" The former is the query of every concern at the present time. There is no doubt about the tonic effect of the present economic situation and, although

unemployment has not grown, there have been small reductions in about half the industrial companies. Truly employees are rapidly finding jobs elsewhere, but nevertheless the amount of reduction that has taken place has reduced sickness absenteeism and over-all absenteeism greatly. Absenteeism for all causes was probably 10 per cent in 1946, 9 per cent in 1947, and was running at about 8 per cent over-all in 1948, but has rapidly fallen to 3 per cent and 4 per cent partly because of a mild Winter, and because of the changing phase of industry. War gratuities have been spent and there is less easy money about. The cost of living has risen 7 per cent in the last year.

Reduction in Turnover

Labor turnover has fallen rapidly. Occasionally it was as high as 300 per cent per annum, particularly where there was female labor under eighteen years of age. Commonly, for such labor, it was 100 per cent and even for men in well-established units, the figure had grown to the order of 20 per cent. This figure has drastically fallen and over-all might be 14 per cent compared with 50 per cent or even 100 per cent of some months ago. There is no doubt that operatives are working harder.

The tonic effect is thus remarkable.

People are undoubtedly happier to be working more steadily. Experienced works staff find it difficult to believe the fact that there is mild reductions of employment in local industries, especially in those cases where they are still expanding a little themselves. The effect is to be seen also on the trade unions. It is not easy for trade unions to have a grip when there are far more jobs than there are people. The coherence of trade union movements depended on branch meetings. Through branch meetings, the unions could know what their constituents were thinking. It was possible to pass down a policy to the branch. The branch meetings were not possible during the war, and it will be many years before the trade unions can recover their discipline of their own shop stewards, and control the Communist influence. As one TUC official put it, the unions are the "white man's burden of industry." Industry needs good unions and must help to insure that the unions can again do their proper job.

The tonic effect is felt in management. Companies must watch costs again. The salesman must do his job properly. Companies have been wondering for some years how they could maintain a general discipline through-

(Continued on page 58)

A post-war view of London from the top of St. Paul's Cathedral looking eastward. On the right are the ribs of Cannon Street Station, with Tower Bridge behind it. To the left of the Bridge is Trinity House. In the foreground are reminders of the Blitz fire which encircled St. Paul's.

BRITISH COMBINE PHOTOGRAPH



A New Pattern for Military Procurement



DEVANEY PHOTOGRAPH

LEON MALMAN

Member of the Bar, State of New York

*T*HE Armed Services Procurement Act of 1947 went almost unnoticed at the time of its passage and approval in February of this year. However, sharply increased appropriations for military equipment, and the increase of the Air Force to a 70-group basis, have directed new attention to its provisions.

The Act is designed to make uniform the purchasing authority of the Army, Navy, Air Force, United States Coast Guard, and the National Advisory Committee for Aeronautics. Placing all of the armed services under the same basic procurement statute should eliminate many of the statutory and procedural differences which have

existed among them in the past. In connection with the settlement of contract termination claims, both the armed services and industry have had excellent experience recently which indicates forcibly the desirability of the services operating on the same basis wherever possible. In implementing their termination work the Army and Navy together drew up and promulgated the Joint Termination Regulations which were so great an aid in disposing of the war termination problem speedily and equitably.

At present the Army, Navy, and Air Force are at work on a similar joint document under the Armed Services Procurement Act, known as the Armed

Services Procurement Regulation. The first three sections of this Regulation, dealing with general matters, procurement by advertising, and procurement by negotiation, have already been issued. It may be anticipated that this document will be as great a help in procurement as the Joint Termination Regulations were in termination.

The stated Congressional purpose in enacting this Act was to provide "for a return to normal purchasing procedures through the advertising-bid method on the part of the armed services." This advertising-bid method has been the traditional method followed by governmental agencies in making their purchases. Under it, the

Government's wants are announced publicly well in advance of the time they are needed and are described in considerable detail, so that all those who are interested may offer to furnish those wants by submitting their proposed price in the form of a sealed bid.

At an appointed time and place these bids are opened publicly and an award of the contract made to the lowest bidder. The theory of this procedure is that such publicity will best protect the Government by preventing collusion or fraud between suppliers and Government agents, while at the same time giving all comers an equal opportunity to sell to the Government. The Act adopts the advertising-bid method for the general run of purchases by the armed services, by requiring its application in all but certain stated categories of cases.

When Negotiation Is Proper

The recent war showed repeatedly how this approach will not work when demand far outstrips supply, when specifications cannot be written with precision, when speed in purchasing is important, and in numerous other situations. The Act seeks to capitalize on the lessons learned by the armed services in buying over \$200,000,000,000 worth of goods and services during the war, almost exclusively by means of negotiated contracts.¹ As a result, for probably the first time in the history of governmental purchasing, an attempt has been made to define with some precision and completeness the situations in which purchases by negotiation would be proper and necessary. Under Section 2(c) of the Act these are the situations:²

1. *Purchases made during a national emergency:* In enacting this provision, Congress stated: "With the prospect that any future war may start with great suddenness, minimum prepared-

ness requires that legislation be available to permit the shedding of peacetime requirements simultaneously with the declaration of any emergency by the President or by the Congress."

The effect of this provision is to place all future war procurement on a negotiated basis immediately upon the declaration of a national emergency, without requiring separate enabling legislation for this purpose, as has been the case in the past.

2. *Supplies required by a public exigency:* The language of this subsection represents a re-enactment of existing legislation. However, under the prior legislation the Comptroller General³ had uniformly ruled that an exigency existed only when an emergency which could not have been foreseen arose. To counteract this, Congress has stated that this provision "will be available whenever unusual urgency requires an immediate purchase, irrespective of

³ The Comptroller General is the head of the General Accounting Office (31 U.S.C. sec. 42). Among other things he has the duty to "report to Congress every expenditure or contract made by any department or establishment in any year in violation of law" (31 U.S.C. sec. 53). The General Accounting Office is the place where "all accounts whatever in which the Government of the United States is concerned, either as debtor or creditor, shall be settled and adjusted" (31 U.S.C. sec. 71). By virtue of these provisions the Comptroller General has uniformly asserted the authority to review all Government contracts and payments made thereunder to determine whether such contracts have been made pursuant to law and whether the appropriations out of which such payments have been made are proper for the particular purpose.

whether that urgency could or should have been foreseen."⁴

3. *Where the aggregate amount is less than \$1,000:* This provision represents an extension of an existing \$500 exception.

4. *Personal and professional services:* This also represents a re-enactment of existing legislation.

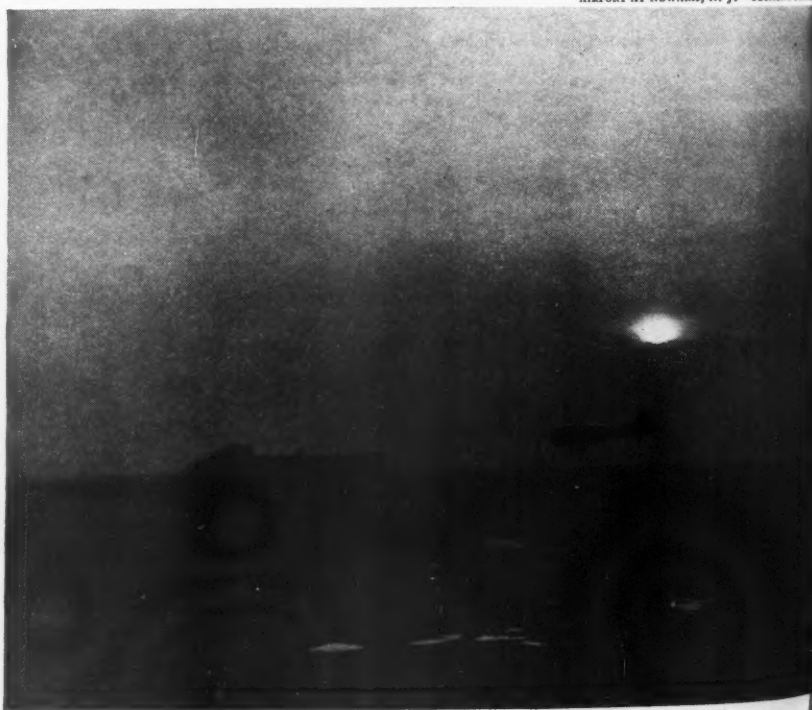
5. *Services of educational institutions:* This subsection permits the negotiation of contracts for educational or vocational training services to armed service personnel at educational institutions, and for necessary material, services, supplies, and reports furnished by such institutions in connection with such services.

6. *Purchases outside the United States:* This provision is based on existing legislation and applies to construction outside the continental United States and to purchases made abroad for use by overseas installations or occupational forces. It is designed to accommodate procurement in such areas to prevailing business conditions which may be encountered there.

7. *Medicines or medical supplies:* This subsection is an extension of pre-

⁴ Examples of situations in which this authority will be used in the future are set forth in Armed Services Procurement Regulation, paragraph 3-202.2.

AIRPORT AT NEWARK, N. J.—CUSHING PHOTO



¹ The term "negotiation" is used to describe any manner of contracting other than advertising-bid method. However, it does not imply the absence of competition but rather makes real competition possible in situations in which adherence to the advertising-bid method would, as a practical matter, mean no competition. Negotiations are typically conducted on the basis of informal bids submitted by a number of proposed contractors. These bids are reviewed in the light of actual cost experience where available and of estimated cost data. Negotiators familiar with the particular item involved are in this way able to arrive at a price which is close, but fair to both sides. Added emphasis is placed on close pricing by means of appropriate price revision articles which are included in negotiated contracts.

² The numbers correspond to the subsections of Sec. 2(c) of the Act which contains each of the provisions discussed.



FREIGHTER PASSING THROUGH SOO LOCKS—GENDREAU PHOTOGRAPH

vious legislation and will undoubtedly apply to proprietary and other medicines, as well as to surgical instruments, surgical and orthopedic supplies, X-ray supplies and equipment, and hospital equipment.

8. *Supplies purchased for authorized resale:* This applies to purchases made from appropriated funds of items to be offered for resale at ships' stores and commissaries.⁵

9. *Perishable subsistence supplies:* Procurement of advertising presupposes the ability of a bidder to guarantee the availability of a specific quantity of merchandise of a describable quality at a stated place and time. Clearly this cannot be done in the case of perishables.

10. *Supplies or services for which it is impracticable to secure competition:* While similar language appeared in previously existing legislation, the legislative history of this provision makes it in effect new and extremely sig-

nificant. The position taken by the Comptroller General under the previous legislation was that he could review and veto a determination of impracticability in almost any situation. Now, however, the express legislative intent is "that this section should be construed liberally and that the review of (purchases made under it) should be confined to the validity and legality of the action taken and should not extend to reversal of bona fide determinations of impracticability, where any reasonable ground for such determination exists."⁶

11. *Experimental, developmental, or research work:* This provision applies to contracts for the carrying on of experiments or development or research work including the making of tests and the furnishing of reports. It also applies to contracts for supplies needed in connection with such experiments, developments, research, or tests. Similar authority has previously been available, but only for the Navy.

12. *Supplies or services, the nature of which should not be publicly disclosed:* This is an essential security measure, and represents an extension of previously existing legislation.

13. *Technical equipment involving standardization and interchangeability of parts:* The statute contains no definition of the term "technical equipment," but it would appear that this term should apply to any complex aeronautical, electrical, electronic, automotive, or mechanical equipment. Under the statute, negotiated purchases of such equipment may be made where necessary to assure standardization of the equipment and interchangeability of its parts, and where such standardization and interchangeability are necessary in the public interest. It would seem that this provision would be available in order to enable the armed services to limit the quantity of spare parts which must be carried in stock; to make possible complete interchangeability of parts of damaged equipment during combat or other emergency conditions; or where equipment produced by a number of suppliers have performance characteristics which vary in essential respects, notwithstanding detailed specifications and rigid inspection and where such variances prevent complete standardization and full interchangeability.

Eliminates Middleman's Profit

This authority will not enable the services to select arbitrarily the equipment of certain suppliers. Initial procurements of equipment and spare parts will be made by advertising and competitive bidding, unless such equipment comes within one of the other provisions of Section 2(c) of the Act. Once such equipment has been standardized, however, subsequent purchases of such items and of spare parts would be made under this subsection by negotiation. This provision will also enable the services to buy spare parts directly from those who manufacture such parts, rather than from the assembler of the end item, thereby eliminating a considerable and unnecessary profit to a middleman.

14. *Supplies requiring a substantial initial investment or an extended period of preparation for manufacture:*

(Continued on page 38)

⁵ These activities are different from Army post exchanges and Navy ships' service stores which operate with non-appropriated funds, namely, funds which have not been provided by Congress.

⁶ Examples of situations in which this authority will be used are set forth in Armed Services Procurement Regulation, paragraph 3-210.2.



SOUTH STREET AND BROOKLYN BRIDGE, NEW YORK CITY—THORNTON PHOTO

Productivity Studies:

PLANNING GUIDES FOR INDUSTRY

EWAN CLAGUE

*Commissioner of Labor Statistics
United States Bureau of Labor Statistics*

HOW DOES MAN-HOUR PRODUCTION IN THE UNITED STATES COMPARE WITH THAT OF OTHER NATIONS? WHAT GENERAL CHARACTERISTICS OF CURRENT PRODUCTIVITY ARE REVEALED BY RECENT STUDIES? PRODUCTIVITY MEASUREMENTS ARE BEING EXTENDED INTO IMPORTANT AREAS OF MANUFACTURING NOT PREVIOUSLY COVERED.

*P*RODUCTIVITY, once simply a tool for the economist, is acquiring new significance to the worker, the business man, the soldier, and the statesman. It has long been understood that the relatively higher standard of living of the American citizen was the direct fruits of higher productivity in our economy. In effect, it has given us not only bread and butter, but jam as well. To-day, it appears that high American productivity is the only factor which, perhaps, can return economic stability to a troubled world.

During most of the last century there has been a high and steady rate of growth in production per man-hour in the United States. Primarily, this has resulted from the continued acquisition of technical knowledge and its steady application to the jobs we want done. The cumulative effects have reshaped the lives of all of us. As our production potential has increased, the average worker has been able to buy steadily increasing quantities of goods. Simultaneously with more goods, we have been able to afford more leisure time

in which to enjoy them. Many arduous but necessary tasks have been eliminated. The labor of the home has been greatly reduced. As we have freed ourselves from the pinch of material wants, we have been able to divert an increasing proportion of our resources to such activities as schools and social services. And it should come as an invigorating thought that this period of rapid evolution in potentialities and institutions has not reached its end; in-

deed, it may hardly have started as yet. Another of the consequences of high American productivity was revealed in the recent war. This country diverted more than 11 million men and women into its armed services. Yet those remaining in industry supplied the necessary wants of the supporting economy (and on no greatly reduced scale) and at the same time produced nearly half of the world output of munitions. This record makes it evident that, with wis-

dom we should be able to face the future unafraid.

The days when small groups of determined soldiers and brilliant generals were enough to win wars have passed. Modern wars are won by the massing of economic strength. The destruction of an enemy's industrial potential has become a primary objective of warfare. A country's military strength is limited by and becomes a reflection of its basic productive capacity. It was the productive capacity of the United States which turned the scales against Hitler in World War II.

A nation's economic strength is made up of many elements, and not in all of these does the United States excel. Other things being equal, a country with a greater population can produce more than a smaller one. The United States' 145 million population, 6½ per cent of the world's total, is overshadowed by Russia's 200 million, which in turn is itself dwarfed by India's 400 million and China's 450 million.

Average Hours Contributed

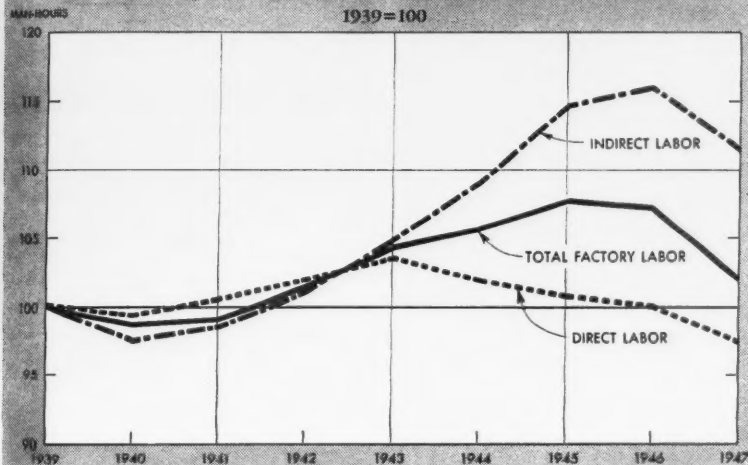
Production achieved will be determined not only by the number working, but also by the average hours contributed per person. Working schedules are probably shorter in the United States than in any other major country. At the same time, the experience of the recent war demonstrates that rapid adjustments can be made under the stress of necessity.

Given a specific total of hours worked, as fixed by population and working schedules, the final factor in determining total production is the average amount of production achieved per working hour. It is here that the United States leads the other major nations. The advantage is so great that with but a few exceptions, it must be reckoned, not in percentages over, but in multiples of the productivity in other countries. Our higher productivity represents a skilled labor force, a trained management group, modern capital equipment, developed natural resources, and an unmatched system of production organization.

With respect to natural resources, reference to a recent issue of DUN'S REVIEW will indicate that our reserves

MAN-HOURS EXPENDED PER UNIT FOR SELECTED TYPES OF CONSTRUCTION MACHINERY

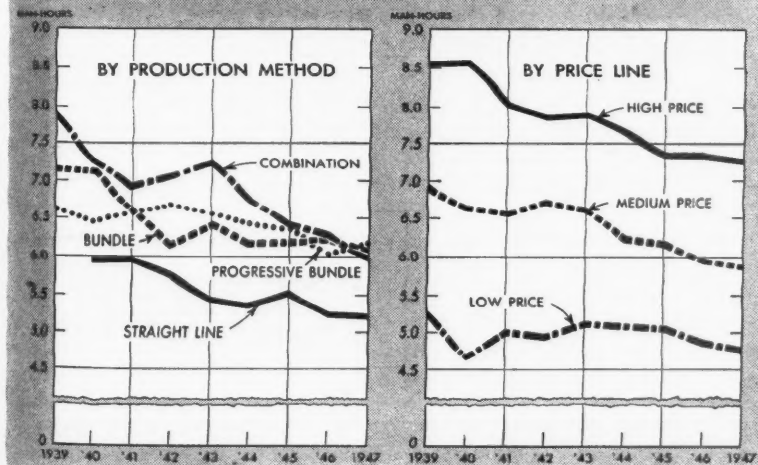
1939=100



ABOVE Indirect labor costs per unit of production rose sharply in many lines during the latter years of World War II and continued high during the early post-war period. As competition mounts, substantial reductions are expected.

BELOW Where the competition of low-cost volume production has already forced maximum efficiency in production techniques or where mass production (straight line) methods are in use, the least gains in productivity may be expected when volume is increased.

TOTAL FACTORY MAN-HOURS EXPENDED PER DOZEN MEN'S DRESS SHIRTS



are in no sense overwhelming.* Rather, what resources we have are, in comparison with other nations, well developed. Too many Americans are perhaps inclined to credit our position to an abundance of resources rather than to the country's productive genius.

The United States faces to-day an unprecedented production job. There is the highest demand ever recorded for both consumer and capital goods for domestic consumption. There is a high demand for exports. We have determined to rebuild our military strength to a safety level consistent with present world conditions. Finally, we have undertaken to assist in the reconstruction and rehabilitation of the European economy, and have pledged the shipment of goods to assist in this task.

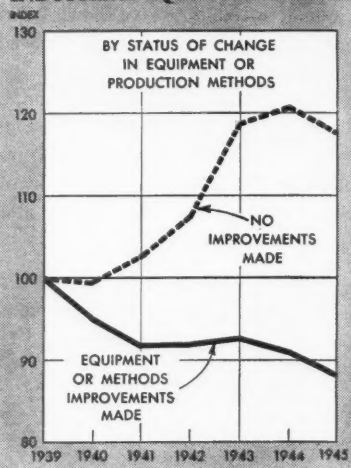
With our present labor force fully occupied, the only major possibility for lightening this burden is through increasing productivity. Virtually every

person who has studied the problem believes that a substantial increase in productivity during the next few years can be achieved.

Such evidence as is available indicates that we have not yet reached the point where we could have expected to be if the war had not intervened. Astonishing technical strides were made in munitions production, but neither men nor equipment could be spared for the improvement of our civilian industries. These basic industries, then, lagged during the war period. Since then, many improvements have been made, but the emphasis during this period has been on production rather than on productive efficiency. In general, productivity seems to have improved

(Continued on page 68)

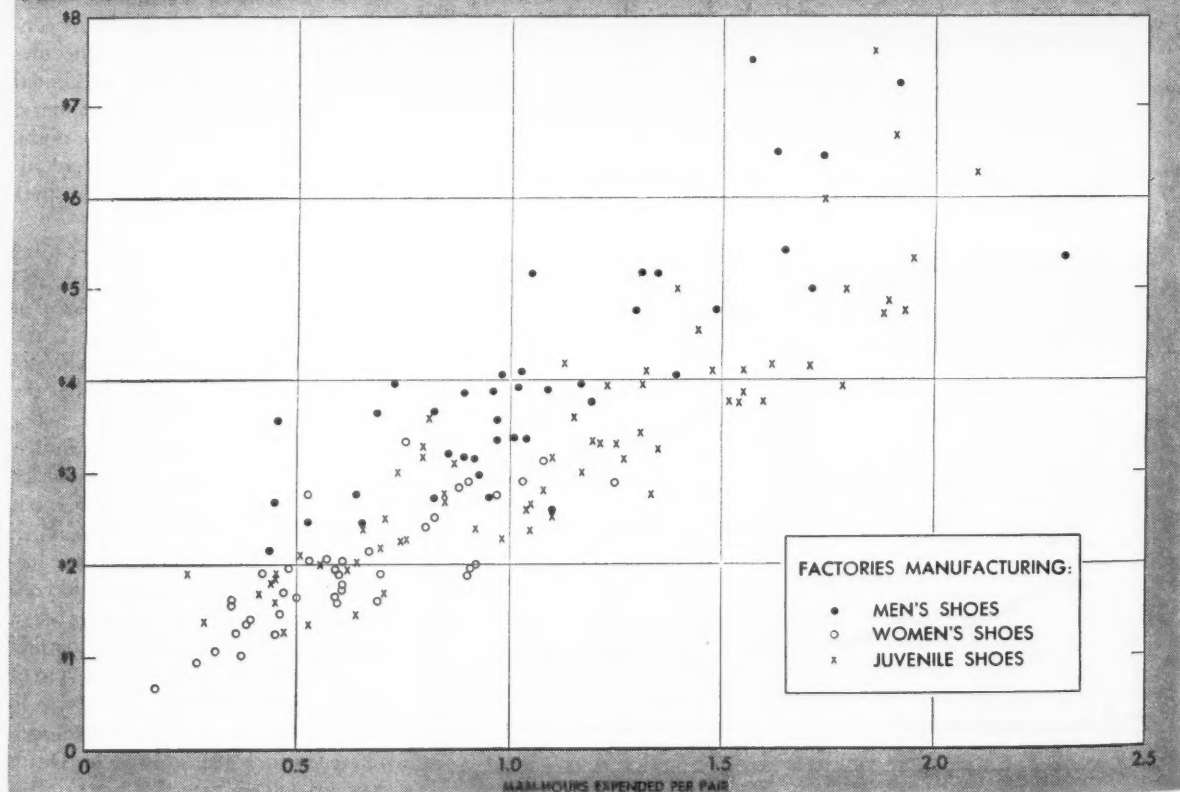
TRENDS IN MAN-HOURS EXPENDED PER UNIT FOR SELECTED INDUSTRIAL EQUIPMENT PLANTS



ABOVE Concerns must keep abreast of technological change if they are to maintain productive efficiency. Companies which have made improvements in machinery, equipment, and work methods have cut the man-hours per unit; those that haven't have raised them.

BELOW Companies in direct competition with each other show a wide variation in productivity. This variation between plants is not unusual, but may be found in a variety of industries. At the same price level the number of man-hours required per pair may be doubled.

MAN-HOURS EXPENDED PER PAIR BY AVERAGE FACTORY PRICE FOR THE MANUFACTURE OF SHOES IN 153 SELECTED ESTABLISHMENTS DURING 1945



*B*USINESS ACTIVITY ROSE NOTICEABLY DURING THE FIRST HALF OF SEPTEMBER FOLLOWING A MILD DECLINE THAT RESULTED FROM UNUSUALLY HOT WEATHER. INDUSTRIAL EMPLOYMENT AND OUTPUT ROSE; INCOME WAS NEAR A PEAK LEVEL; RETAIL VOLUME WAS HIGH; AND THE NUMBER OF FAILURES REMAINED LIMITED.

*I*NDUSTRIAL production which started to rise in August continued to increase during the first half of September. The output in some industries was temporarily curtailed by transportation difficulties arising from the New York City truckers' strike and the shipping strike along the West Coast. The adverse effects of these limitations generally were small.

By mid-September steel production had reached the highest level since the preceding June. Automobile assembly lines were slowed in September as parts shortages and scattered strikes limited weekly output to less than 100,000 vehicles; during July and August weekly production averaged about 106,000. There was a dip in coal production in September; electric output was steady at near-peak levels.

But over-all production continued to increase despite set-backs in some lines. Production levels were moderately above those of a year ago and were close to the post-war peaks reached during the first quarter of this year.

Employment Fewer persons were working on farms in August than in July due to a moderate, seasonal slackening of farm operations. Although nonfarm employment increased to a new high for the third consecutive month, the gain was not large enough to offset the drop in agricultural employment.

Total employment, consequently, decreased to 61,245,000 persons; this was 370,000 below the July peak. Nonfarm workers totalled 52,801,000 while 8,444,000 persons were engaged in agricultural work. Total employment was



CORNFIELD IN AUTUMN NEAR HEMPSTEAD, N. Y.—DEVANEY PHOTOGRAPH

The Trend of Business

PRODUCTION . . . PRICES . . . TRADE . . . FINANCE

expected to decline further in September with the return of many temporary workers to schools and colleges.

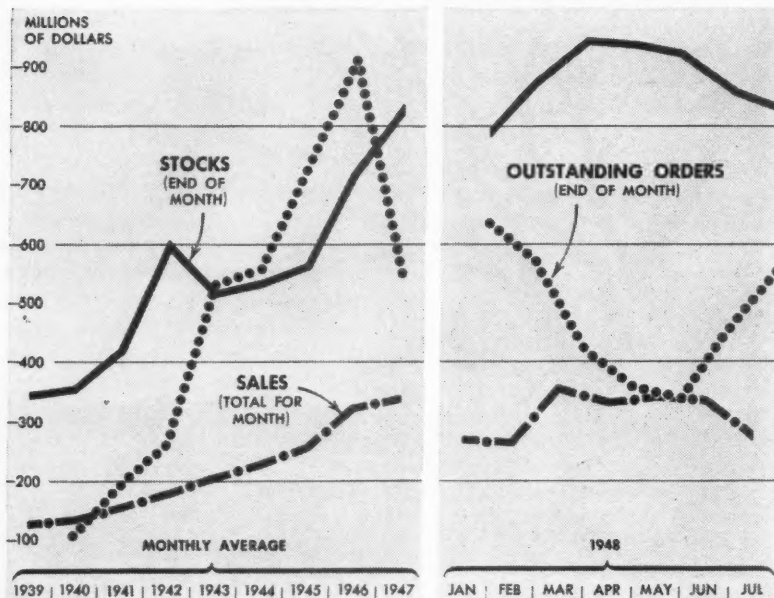
Unemployment declined during August to 1,941,000, down 14 per cent from July and 155,000 less than in August a year ago. The average duration of unemployment was eight and one-half weeks as compared with ten weeks a year ago.

Wages and Prices Personal income in July, the latest month for which figures are available, was at an annual rate of \$211.5 billion. This was about \$800 million less than the all-time peak annual rate of \$212.3 billion established in June.

A drop in the annual rate of income for persons engaged in agricultural pursuits was responsible for the decrease in total personal income; nonfarm workers income advanced to a new record annual rate of \$188.2 billion from \$187.7 billion in the previous month. The drop in farm incomes was due partly to a slight decline in crop prices and partly to a seasonal dip in livestock receipts.

Most wholesale commodity price averages declined during the last half of August and the first half of September. Government estimates of bumper wheat and corn crops were reflected in grain prices which fell steadily during the period. While prices of many other

SALES, STOCKS AND OUTSTANDING ORDERS AT 296 DEPARTMENT STORES



The dollar volume of department store stocks during the first half of 1948 was well above the average monthly level during the 1939 through 1947 period. At the same time orders outstanding at the end of the month declined noticeably although seasonal increases occurred in June and July. While seasonal fluctuations were apparent in the monthly sales volume figures for 1948, the level remained near the average of the post-war years. Data from the Board of Governors of the Federal Reserve System.

commodities remained steady or advanced slightly, the drop in grains and several other principal food products pushed the DUN & BRADSTREET Daily Wholesale Commodity Price Index down to 277.97 on September 7; this was the lowest level for this index since March 1948.

Trade Spurred by cool weather and the reopening of schools, consumers increased their purchasing during the early part of September. The usual promotional sales of Fall merchandise were numerous and attracted favorable attention. Retail trade dollar volume remained moderately above the level of a year ago. Unit volume in some luxury lines continued to decline.

The demand for Fall apparel increased considerably with emphasis on back-to-school items. While the resistance of many consumers to high-priced foods remained strong, total food volume moderately exceeded that of a year ago. There was a noticeable rise in the demand for branded major appliances during the latter part of August; house-

hold furnishings were eagerly sought.

Consumer spending rose slightly in August and was moderately above the 1947 level. The DUN'S REVIEW Trade Barometer, a measure of consumer purchasing, was 315.4 (preliminary) in August as compared with 271.9 a year ago, and 310.8 in the preceding month. The barometer is adjusted for seasonal variations and for the number of business days in the month; 1935-1939=100.

The July barometer, based on complete data, reached a new all-time high for the third successive month. At 310.8 it was 2.4 per cent above the June high of 303.4, and 10.4 per cent above the 281.5 of a year ago.

Although trade activity declined slightly during July in 12 of the regions, consumer buying in all regions compared favorably with that of a year ago. The barometers in the Northeastern section of the country continued to be somewhat below the United States barometer, while those in the South and Southwestern sections were generally well above the United States barometer.

Wholesale order volume increased slightly but remained close to the level

Industrial Production

Seasonally Adjusted Index: 1935-1939=100. Federal Reserve Board

	1945	1946	1947	1948
January	234	160	189	193
February	236	152	189	194
March	235	168	190	192
April	230	165	187	188
May	225	159	185	191
June	221	170	184	192
July	218	172	176	187
August	189	175	182	187
September	167	174	180	186
October	162	181	192	186
November	168	182	192	186
December	163	182	192	186

* Approximation; figure from quoted source not available

Wholesale Commodity Prices

Index: 1926=100. U. S. Bureau of Labor Statistics

	1945	1946	1947	1948
January	104.9	107.4	141.5	161.1
February	105.2	107.7	144.5	161.1
March	105.3	108.9	149.0	161.4
April	105.7	110.2	147.7	162.8
May	106.0	111.0	147.1	161.9
June	106.1	112.9	148.0	166.2
July	105.9	124.7	150.6	167.0*
August	105.7	129.0	153.6	168.6*
September	105.2	122.0	157.4	169.3*
October	105.9	121.1	158.5	169.3*
November	106.8	121.7	159.7	169.3*
December	107.7	140.9	163.2	169.3*

* Approximation; figure from quoted source not available.

Consumers' Price Index

Index: 1935-1939=100. U. S. Bureau of Labor Statistics

	1945	1946	1947	1948
January	127.1	129.9	153.3	168.8
February	126.9	129.6	153.2	167.5
March	126.8	130.2	156.0	166.9
April	127.1	131.1	156.2	169.3
May	128.1	131.7	156.0	170.5
June	129.0	133.3	157.1	171.7
July	129.4	141.2	158.4	173.7
August	129.3	144.3	160.3	174.5*
September	128.9	144.9	163.8	174.5*
October	128.9	144.6	163.8	174.5*
November	129.3	144.2	164.9	174.5*
December	129.3	153.3	167.0	174.5*

* Approximation; figure from quoted source not available.

WHOLESALE FOOD PRICE INDEX

The index is the sum total of the price per pound of 31 commodities in general use. It is not a cost-of-living index.

	1948	1947	1948
Sept. 14..	56.05	Sept. 16..	57.12
Sept. 7..	6.86	Sept. 9..	7.02
Aug. 31..	6.90	Sept. 2..	6.71
Aug. 24..	6.94	Aug. 26..	6.64
Aug. 17..	7.07	Aug. 19..	6.57
High July 13	57.36	High Dec. 30	57.24
Low Feb. 24	6.61	Low May 20	5.95

DAILY WHOLESALE PRICE INDEX

The index is prepared from spot closing prices of 30 basic commodities (1930-1932=100).

Week Ending	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Sept. 13..	280.93	280.78	281.12	280.54	279.80	279.85
Sept. 11..	Holiday	277.97	279.68	280.20	280.44	280.45
Sept. 4..	278.12	279.46	280.87	280.10	278.69	278.47
Aug. 28..	275.68	274.65	276.68	278.05	279.19	278.29
Aug. 21..	281.35	280.41	280.07	279.13	278.13	277.67

BUILDING PERMIT VALUES—215 CITIES

Geographical Regions:	1948	1947	P. Ct. Change
New England.....	\$10,541,669	\$14,611,202	+33.7
Middle Atlantic.....	79,447,404	62,011,404	+28.1
South Atlantic.....	29,000,958	31,436,642	-7.7
East Central.....	78,650,851	67,009,238	+17.4
South Central.....	41,306,220	35,685,662	+16.0
West Central.....	20,812,364	16,808,035	+23.2
Mountain.....	12,126,964	9,207,108	+31.7
Pacific.....	94,356,501	52,964,820	+78.2
Total U. S.....	\$375,332,931	\$289,823,511	+29.5
N. Y. City.....	\$40,784,960	\$31,507,404	+58.0
Outside N. Y. C.....	\$325,547,971	\$258,316,107	+26.0

BANK CLEARINGS (Thousands of dollars)

	1948	1947	% Change
Total 24 cities.....	27,654,312	24,217,133	+14.2
New York.....	28,248,737	26,378,006	+7.1
Total 25 cities.....	55,003,049	50,596,059	+9.5
Average Daily.....	2,150,117	1,946,002	+10.5

Employment

Millions of Persons, U. S. Bureau of Census

	1945	1946	1947	1948
January	52.1	51.0	55.4	57.1
February	52.7	51.2	55.8	57.1
March	53.2	52.5	56.3	57.1
April	53.6	54.1	58.1	57.1
May	53.8	54.8	58.1	57.1
June	54.6	54.8	60.1	61.3
July	54.4	54.8	60.1	61.5
August	53.6	57.7	59.6	61.2
September	51.6	57.0	58.9	
October	51.4	57.0	59.2	
November	51.4	57.0	58.6	
December	57.2	59.3	58.0	

Retail Sales

Seasonally Adjusted Index, 1935-1937=100, U. S. Department of Commerce

	1945	1946	1947	1948
January	187	231	282	315
February	189	238	288	322
March	193	241	298	328
April	184	246	298	326
May	189	259	300	329
June	193	281	302	334
July	200	282	301	331
August	197	277	298	333*
September	198	273	315	
October	208	273	318	
November	218	279	325	
December	210	284	330	

* Approximation; figure from quoted source not available.

Industrial Stock Prices

Monthly Average of Daily Index, Dow-Jones

	1945	1946	1947	1948
January	153.95	160.00	176.10	176.61
February	157.13	160.66	181.54	168.47
March	157.22	164.77	176.66	166.04
April	160.47	205.88	171.28	185.36
May	165.58	206.61	167.10	186.38
June	167.31	207.31	183.76	191.05
July	161.86	202.27	183.64	187.05
August	160.16	199.44	180.08	181.77
September	177.96	172.72	176.82	
October	185.07	169.48	181.92	
November	190.22	168.94	181.42	
December	192.74	174.38	179.18	

NEW BUSINESS INCORPORATIONS

	July 1948	July 1947	7 Months 1948	1947
New England.....	510	524	4,038	4,568
Middle Atlantic.....	2,361	2,723	20,017	22,172
East North Central.....	1,317	1,440	10,771	12,097
West North Central.....	462	584	3,644	3,805
South Atlantic.....	1,095	1,317	8,349	9,572
East South Central.....	255	368	2,014	2,498
West South Central.....	542	812	4,128	4,173
Mountain.....	316	291	2,397	2,435
Pacific.....	832	976	6,570	6,794
Total U. S.....	7,600	9,041	61,928	68,414

THE FAILURE RECORD

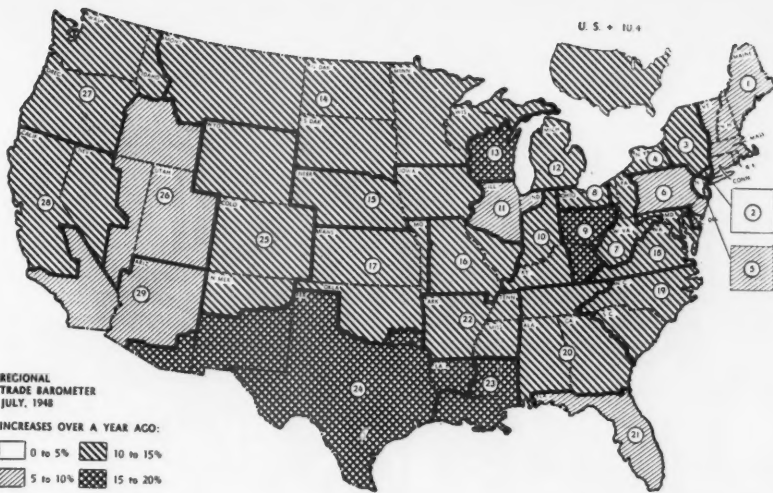
	Aug. 1948	July 1948	Aug. Per Cent 1947	July 1947
DUN'S FAILURE INDEX*				
Unadjusted.....	19.6	18.9	13.4	+ 46
Adjusted, seasonally.....	22.3	20.3	15.2	+ 47
NUMBER OF FAILURES.....	439	420	287	+ 53
NUMBER BY SIZE OF DEBT				
UNDER \$5,000.....	75	64	50	+ 50
\$5,000-\$25,000.....	256	219	143	+ 79
\$25,000-\$100,000.....	84	110	69	+ 22
\$100,000 and over.....	24	27	25	- 4
NUMBER BY INDUSTRY GROUPS				
Manufacturing.....	100	110	99	+ 10
Wholesale Trade.....	61	62	44	+ 39
Retail Trade.....	164	166	102	+ 60
Construction.....	40	36	10	+ 111
Commercial Service.....	35	37	23	+ 52

(Liabilities in thousands)

CURRENT LIABILITIES.....	\$21,442	\$13,876	\$14,993	+ 44
TOTAL LIABILITIES.....	21,442	14,026	14,993	+ 44

* Apparent annual failures per 10,000 enterprises, formerly called DUN'S INSOLVENCY INDEX.
† Per cent change of August 1948 from August 1947.

More detailed figures for bank clearings, building permits, failures, new business incorporations, wholesale food prices, and wholesale commodity prices appear in DUN'S STATISTICAL REVIEW.



TRADE ACTIVITY IN TWENTY-NINE REGIONS

REGION	Seasonally Adjusted 1935-1939=100	July 1948	% Change from July 1947	June 1948	Seasonally Adjusted 1935-1939=100	July 1948	% Change from July 1947	June 1948
United States.....	310.8	+10.4	+ 2.4					
1. New England.....	222.8	+ 8.9	- 3.7		15. Iowa and Nebraska.....	317.0	+10.3	+ 8.6
2. New York City.....	246.8	+ 3.0	- 7.3		16. St. Louis.....	300.9	+10.4	+ 3.4
3. Albany, Utica, and Syracuse.....	278.5	+11.4	- 3.8		17. Kansas City.....	313.5	+14.1	- 0.3
4. Buffalo and Rochester.....	278.3	+11.9	- 5.3		18. Maryland and Virginia.....	273.6	+11.2	- 1.4
5. Northern New Jersey.....	215.6	+ 7.8	- 9.9		19. North and South Carolina.....	329.6	+11.7	- 7.3
6. Philadelphia.....	273.5	+10.0	- 0.1		20. Atlanta and Birmingham.....	302.8	+11.1	+ 0.3
7. Pittsburgh.....	271.3	+12.2	+ 3.5		21. Florida.....	309.6	+ 8.9	+ 1.8
8. Cleveland.....	326.2	+12.4	+ 7.8		22. Memphis.....	347.4	+13.3	+ 2.1
9. Cincinnati and Columbus.....	348.5	+15.6	+11.2		23. New Orleans.....	341.1	+16.7	+ 2.7
10. Indianapolis and Louisville.....	357.2	+14.4	+ 8.7		24. Texas.....	308.6	+15.7	+ 5.4
11. Chicago.....	286.0	+ 8.5	+ 6.9		25. Denver.....	305.1	+11.8	+ 1.6
12. Detroit.....	330.0	+14.7	+10.4		26. Salt Lake City.....	286.1	+ 6.9	- 6.4
13. Milwaukee.....	334.1	+17.6	+ 5.1		27. Portland and Seattle.....	336.3	+10.6	+ 2.0
14. Minneapolis and St. Paul.....	283.5	+12.6	- 1.9		28. San Francisco.....	317.5	+10.2	+ 1.3
					29. Los Angeles.....	324.5	+ 8.3	- 0.1

of a year ago. Many buyers were uncertain of future price developments and restricted their ordering to medium and low-priced goods for current delivery. While labor difficulties hampered shipments in some localities, deliveries generally were more prompt than in August and September of 1947.

Finance In September the Board of Governors of the Federal Reserve System raised the reserve requirements of member banks of the Federal Reserve System. This was intended to act as a restraint on bank lending and was part of the co-operative anti-inflation program of the Treasury Department and the Federal Reserve System. Reserve Bank discount rates were raised last January from 1 per cent to 1.25 per cent and in February the reserve requirements of the New York and Chicago Federal Reserve Banks were increased.

Security prices on the New York Stock Exchange remained fairly steady during the last half of August and then turned downward in the first two weeks

of September. The Dow-Jones Industrial Stock Price average dropped from 185.36 on September 7 to 180.62 on September 15. Many observers believed that security price fluctuations during this period reflected to a large extent the unsettled condition of foreign affairs.

Failures The general trend of business failures so far this year has been upward. There were 439 commercial and industrial failures in August, 19 more than in the previous month. Although this was not the high for the year (there were 477 in March and 463 in June) it was the highest total for any August since 1942. The Failure Index, which projects the monthly failure rate to an annual basis and adjusts for seasonal fluctuations, reflected 22 failures per 10,000 concerns in operation during August, the highest failure rate in six years.

Liabilities increased sharply in August to \$21,442,000 from \$13,876,000 in the previous month. The rise was due mainly to the failure of two concerns with liabilities of more than one mil-



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lion dollars each. It was the first time since March that any failures of this size had occurred.

Sixty-one per cent of the month's failures were concerns started since the end of the war; of these, 15 per cent were in their first year of operation. Businesses begun during the war comprised about 20 per cent of the August failures.

Food stores and eating and drinking places accounted for most of the retail failures during August. Food retailers failing were three times as numerous as a year ago and twice as many eating and drinking places failed as in the corresponding month in 1947. About one-fourth of the manufacturing failures occurred in lumber and lumber products, principally furniture. A marked decline appeared in the machinery industry, where 10 failures occurred; this was less than one-half as many as in August 1947, and the lowest number in this line in more than eighteen months.

Most geographic regions reported an increase in failures in August; the heaviest toll, 123, was in the Pacific States. California had 106 failures or twice as many as any other State.

FAILURES BY DIVISIONS OF INDUSTRY

(Current liabilities in thousands of dollars)	Number		Liabilities	
	1948	1947	1948	1947
MINING, MANUFACTURING. . .	987	840	66,054	89,015
Mining—Coal, Oil, Misc. . .	14	7	1,773	536
Food and Kindred Products . .	122	61	7,870	13,641
Textile Products, Apparel. . .	105	72	2,001	3,630
Lumber, Lumber Products. . .	180	123	6,010	8,917
Paper, Printing, Publishing. .	37	23	2,231	970
Chemicals, Allied Products. .	30	30	2,262	8,721
Leather, Leather Products. . .	44	35	1,712	2,012
Stone, Clay, Glass Products. .	33	20	2,031	1,016
Iron, Steel, and Products. . .	51	46	6,081	3,335
Machinery	153	185	18,244	27,131
Transportation Equipment. . .	33	33	2,214	8,107
Miscellaneous	185	196	12,716	11,298
WHOLESALE TRADE.	434	293	15,377	15,245
Food and Farm Products. . .	110	63	4,593	5,330
Apparel	13	13	478	512
Dry Goods.	12	6	352	615
Lumber, Bldg. Mats., Hdwr. .	34	29	1,495	2,000
Chemicals and Drugs.	26	14	524	210
Motor Vehicles, Equipment. .	27	17	983	337
Miscellaneous	212	151	7,132	6,142
RETAIL TRADE.	1,399	752	23,470	14,341
Food and Liquor.	345	117	4,265	1,381
General Merchandise.	58	26	908	358
Apparel and Accessories. . . .	219	120	3,795	2,135
Furniture, Furnishings.	140	119	2,457	1,901
Lumber, Bldg. Mats., Hdwr. .	105	35	1,814	1,341
Automotive Group.	126	77	2,033	1,328
Eating, Drinking Places.	246	141	5,710	4,100
Drug Stores	29	15	471	177
Miscellaneous	131	93	2,107	1,530
CONSTRUCTION	261	143	10,022	3,474
General Bldg. Contractors. . .	105	47	6,262	1,883
Building Sub-contractors. . .	139	50	2,665	1,121
Other Contractors.	17	6	1,095	470
COMMERCIAL SERVICE.	321	100	17,733	24,873
Highway Transportation. . . .	118	82	12,286	20,015
Misc. Public Services.	9	7	244	242
Hotels	12	3	1,368	3,001
Cleaning, Dyeing, Repairs. . .	30	12	617	403
Laundries	21	11	362	158
Undertakers	1	2	17	17
Other Personal Services. . . .	30	10	292	186
Business, Repair Service. . . .	100	63	2,547	851

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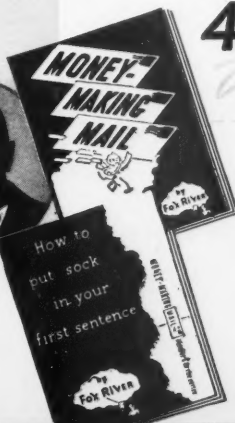
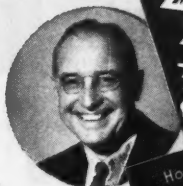
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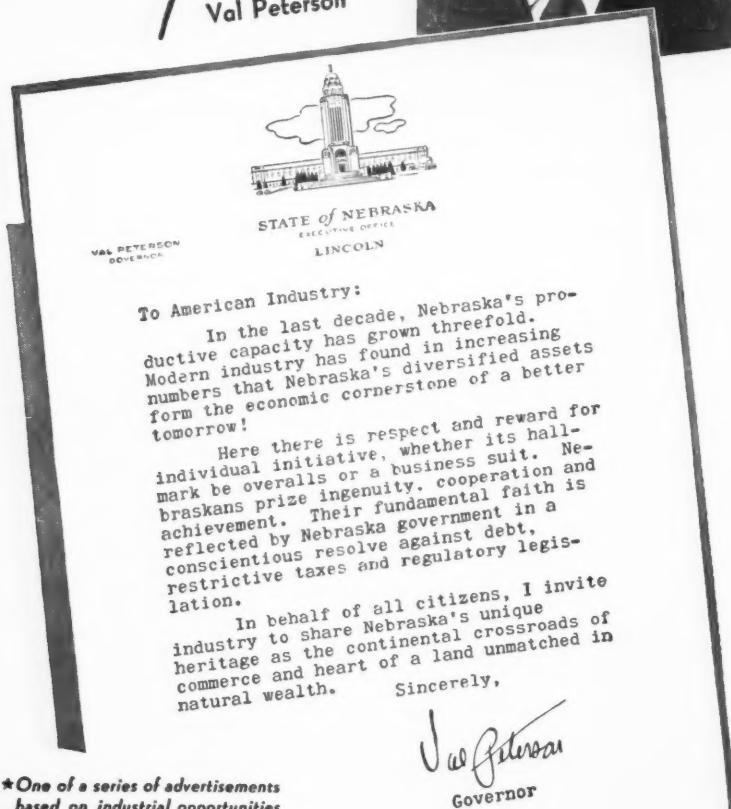
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"For the foremen to know what is going on, and to see at first hand how negotiations are conducted, is bound to strengthen their rôle in management," declares John Lawrence, factory manager.

During meetings following the signing of the agreement, company negotiators briefed foremen on the meaning of the various provisions of the contract.

Preceding negotiations in 1947 on an agreement covering plants in Philadelphia, the company asked foremen to submit ideas for contract changes. This drew nearly 100 suggestions from the 200 foremen who were briefed on the progress of negotiations during weekly meetings.

Filming Documents—A microfilm recorder which makes it possible to photograph both the front and back of a document simultaneously and place the two images side by side on 16mm. film, has been marketed by the Bell and Howell Company, Chicago. It accomplishes this through a mirror reflex system.

When the front and back sides of a document are not being photographed simultaneously, first one side and then



After loading, the document-feeder is easily slipped into position in the slanting cut-away in front of the instrument board.

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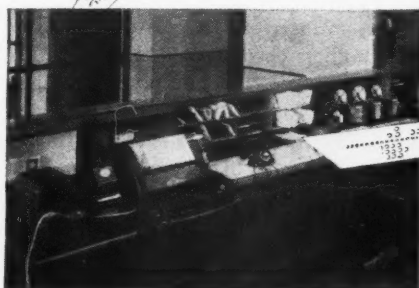
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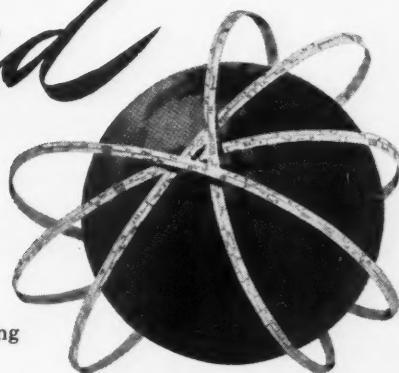
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Branch Office equipment for perforating and transmitting outgoing radiograms. Usually this is the only manual processing operation from branch office origin to destination.



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the other half of the film can be used. Thus the "Filmo Microfilm Recorder" will reproduce about 22,000 check-size documents, double row, on 100 feet of film.

By using the automatic document-feeder made for the machine, one operator can photograph both sides of 250 documents a minute, or 15,000 an hour, and at the same time operate two or more similar machines.

The companion film processor can develop, dry, and spool 100 feet of film every 20 minutes.

Employee Relations—Lever Brothers Company, one of the nation's largest advertisers, recently mailed to the home of each employee a booklet explaining the importance of its advertising both to the company as a whole and the worker as an individual. An extremely favorable reaction was reported for the 14-page, 8½ by 11-inch brochure in color, entitled "What about Lever Advertising?"

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Manufactured under the trade name of "Rib-N-Rite" by the Ribbonwriter Corporation, Dania, Fla., the attachment will produce as many as five copies, all appearing in inked type similar to the typed original. Ribbons are similar and are handled in the same manner as ordinary typewriter ribbons. However, these will outlast ordinary ribbons





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OTHER APPLICATIONS WHERE HARD SURFACING SAVES MONEY

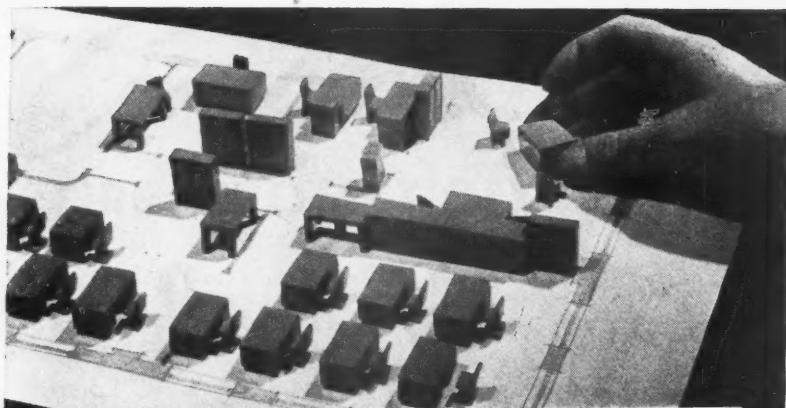
Blanking Dies—Cams—Dipper Teeth—
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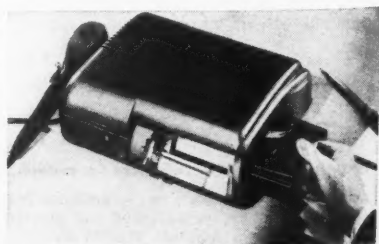
Westinghouse will sign an agreement with any bank, regardless of size, wishing to co-operate. The banks are asked to provide equitable financing for the Westinghouse retail dealers so that they will be able to stock a full line of appliances without having to deplete their working capital to pay for the goods in full at the time of purchase. Likewise the banks are to finance individual customer purchases for the dealers.

In turn, the banks are relieved of problems arising when merchandise must be resold. Low-cost insurance protection against fraud hazards is made available to a bank at its option. Physical damage insurance also has been provided by a group of leading underwriters.

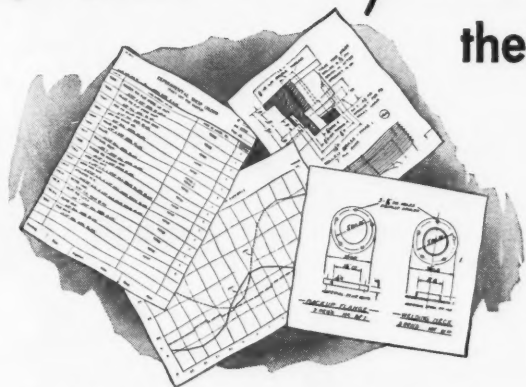
Dictating—An electronic dictating machine known at the "Time-Master" which will fit into a desk drawer and is light enough to be carried on trips has been developed by the Dictaphone Corporation.

For recording dictation the machine employs the "memobelt," a small endless plastic belt of ethyl cellulose about the size of a penny post card. Three of these belts can be mailed in a standard small-size business envelop for three cents. Each is really a 15-minute voice letter.

The Time-Master weighs less than 20



Made to help offices get more out of their photocopying equipment

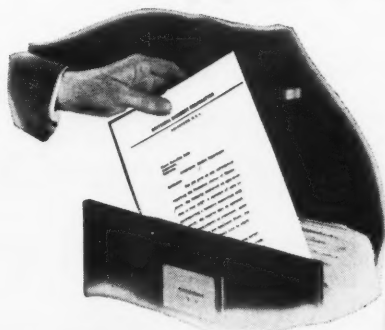


Reproduces letters, forms, drawings . . . in brilliant black and white—Because it combines a special high-contrast emulsion with pure white stock . . . Kodagraph Contact Paper reproduces figures, lines, type, with amazing crispness and legibility . . . gives splendid results with all types of originals.



Handles easily—on any type of contact equipment—Box printer, curved-platen device, vacuum-type machine, or continuous drum—it makes no difference with this new paper. Wide latitude, plus speed, makes handling easy, fine results certain—negative or positive.

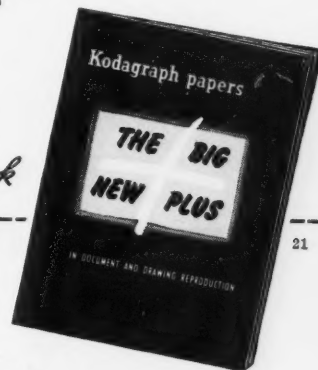
Kodagraph Contact Paper



Comes out flat—stays flat . . . saves time, start to finish—Because it doesn't wrinkle, buckle, or curl . . . Kodagraph Contact Paper not only saves time for operators, but also makes mailing, filing, and reading easy and fast.

See for yourself . . . Try it on your own equipment—See how Kodagraph Contact Paper helps speed work . . . helps get more out of your photocopying equipment. If you have direct process or blueprint equipment . . . be sure to find out about Kodagraph Autopositive Paper, too.

Mail coupon for FREE book



Eastman Kodak Company
Industrial Photographic Division
Rochester 4, N. Y.

Please send me a copy of "The Big New Plus"—your booklet about Kodagraph Contact Paper and the other papers in the Kodagraph line. I have ☐ contact ☐ direct process ☐ blueprint equipment.

Name _____
Department _____
Company _____
Street _____
City _____
State _____

(please print)

EASTMAN KODAK COMPANY
Industrial Photographic Division
Rochester 4, N. Y.

Kodak

How to develop the potential ability of your supervisors

In one company after another, the group-conference system has proved to be a profitable method for training supervisors to . . .

- Develop management ability.
- Apply policies and procedures uniformly.
- Uncover weak spots in company organization.
- Improve employee morale and productivity.

Under this system, trained leaders guide the discussions within small groups. Supervisors themselves get a chance to help formulate company policy and program by contributing their own ideas and information.

EBASCO consultants have a fund of experience in this type of work. They can help you plan such a program, train the leaders from your ranks and get the conferences under way. We'll be glad to discuss the application of this system to the problems of your company.

FREE BOOKLET! Write for your reprint of a helpful article, "Management Development".

EBASCO
SERVICES
INCORPORATED

Two Rector Street
New York 6, N. Y.



Appraisal • Budget • Business Studies • Consulting Engineering
Design & Construction • Financial • Industrial Relations
Inspection & Expediting • Insurance & Pensions
Purchasing • Rates & Pricing • Research • Sales & Marketing
Systems & Methods • Taxes • Traffic

pounds and measures 4½ by 9½ by 12½ inches. It operates on 110 volts AC, but is usable in automobiles and trains with proper adapters. Twin to the Time-Master is the electronic transcribing machine.

Personalized Sales—Counterless or "drawing room" selling, previously confined to small specialty shops offering quality merchandise, is receiving increasingly wide application at Bonwit Teller's.

This new principle has been used partly in the New York and White Plains stores and extensively in the Boston store. It is slated for wide application in the Bonwit Teller stores to be opened in Chicago, Cleveland, and Houston. The New York store was redecorated with this plan in mind.

The reaction from customers has been most favorable as it means less self service and more selection on the part of highly trained personnel. Patrons likewise find it easier to select clothes in which the atmosphere of the drawing room or outdoor terrace of the estate or country club is brought into the store.

Sales help under this plan of personalized service must know stock, houses, labels, and fashions in order that they may understand what the customer should wear. They must appreciate what does and does not become a customer. It likewise means that they must be as well groomed as the customer.

Color—The science of color merchandising provides a springboard for increased retail sales, smarter merchandising, dramatic displays, solid promotions, and faster moving goods, declares Frederick Rahr, color consultant. He was retained by the Martin-Senour Company, Chicago, which has developed a "Nu-Hue Custom Color" system of 1,000 individually compounded paint hues. Mr Rahr suggests:

1. Make goods appear in the store as they actually will appear in use. Back up merchandise with good color backgrounds. Give color conscious customers an opportunity to visualize the items in use.

2. Color coordinate merchandise. Enhance the interest of every item by dramatizing it through color de-



Buz is no better—or worse—at weight guessing than any office boy... but he costs the company about \$1.25 a day in excess postage... and a little good will here and there when mail goes out short paid, gets delayed in the postoffice, and the recipient has to pay Postage Due!

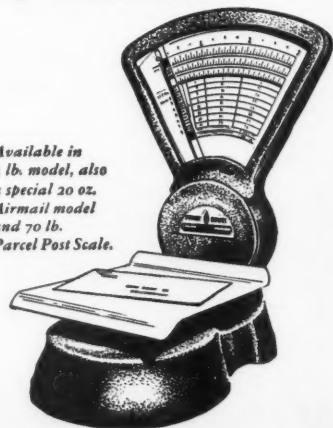
Nobody can weigh mail without a scale... and no scale is more accurate, faster working than Pitney-Bowes... made to the same precision standards as the postage meter, with always reliable automatic pendulum action that gives exact readings instantly... Big eye-level chart, with widely separated, easy to read markings, prevents error, saves time and postage in weighing mail... will give years of service... Call nearest PB office, or write for illustrated folder.

PITNEY-BOWES Mailing Scales



PITNEY-BOWES, Inc.
1549 Pacific Street, Stamford, Conn.
World's largest makers of mailing machines. Offices in 93 cities in the United States and Canada.

Available in
3 lb. model, also
a special 20 oz.
Airmail model
and 70 lb.
Parcel Post Scale.



NICARO

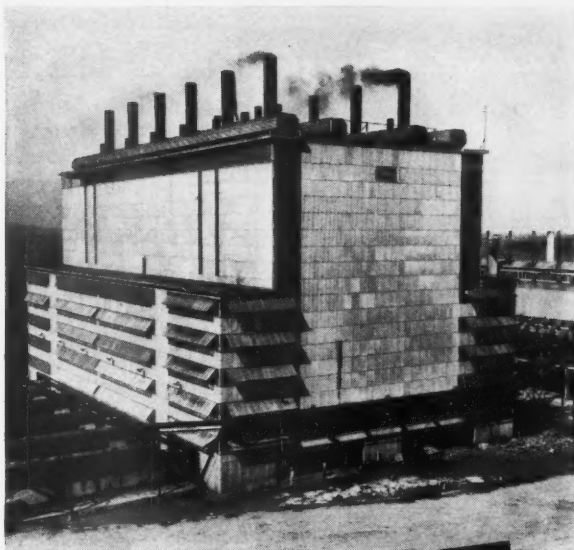
CUBAN NICKEL COMPANY

FOR SALE OR LEASE



IMPORTANT NOTICE

The Munitions Board, through the Bureau of Federal Supply, is now prepared to purchase a minimum of fifteen million pounds metal content of oxide per year for a period of three years at a cost of two (2) cents per pound below the regular market price of the metal, less duty. The price will also be subject to an escalator clause both up and down.



Famous Nickel Oxide Plant Can Supply 10% of World's Requirements . . . and Iron Ore, Besides

The U. S. Government now offers for sale or lease all its right, title and interest in this project, which is known as Plancor 690. Title to all the physical properties is in the Cuban Nickel Company, a Cuban corporation whose entire capital stock is owned by the U. S. Government. In the event of sale, the title to all of these assets can be obtained by transfer of the stock of the Cuban Nickel Company.

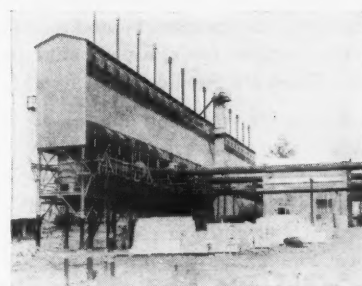
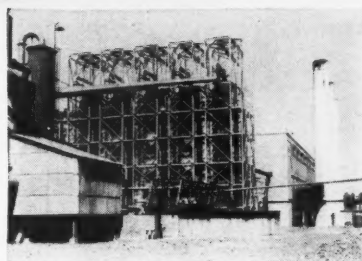
This property is offered for sale or lease, as a whole, and as presently constituted and located, including:

- (a) 1,183 acres of land with rail and port terminals to the markets of the world;
- (b) Mining facilities and metallurgical plant comprising some 30 industrial structures . . . present capacity 32,000,000 pounds of nickel per year;
- (c) Complete townsite . . . more than 400 buildings with utilities and services for 3,000 people;
- (d) Mining rights for 20 years on a royalty basis . . . ore reserves nearly 35 million tons.

The ore deposits are privately owned by the Nicaro Nickel Company, an American corporation whose preferred stock is owned by the U. S. Government. Either sale or lease will include all the U. S. Government's right to mine on a royalty basis for a period of 20 years. The sale of the plant will further include all preferred stock in Nicaro Nickel. Transfer of title will be made subject to a national security clause intended to provide for the optimum utility of this plant in a national emergency—a provision which should tend to favor the operator in such an event.

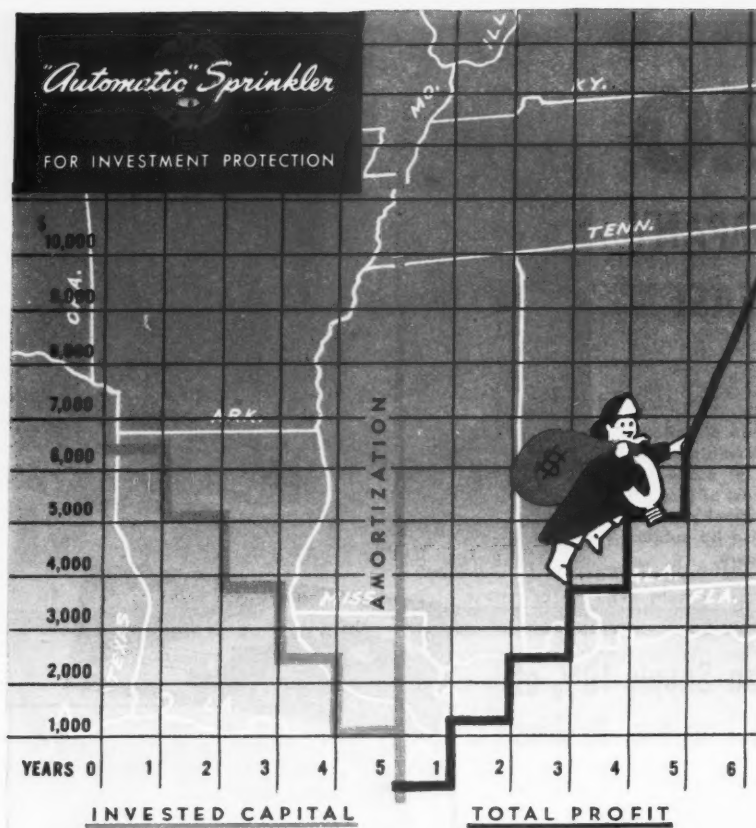
Disposal of this property will be on the basis of sealed bids which will be publicly opened and read at the War Assets Administration, Office of Real Property Disposal, Washington 25, D. C., on December 2, 1948, at 3:00 P.M., E.S.T.

Write to this office at once for bidding instructions and for illustrated brochures describing the plant and townsite with maps, photographs, construction details of all buildings and description of the Nicaro process.



This advertisement is not a basis for negotiation. War Assets Administration reserves the right to consider all proposals in the light of the applicable objectives of the Surplus Property Act and to reject any or all bids.





South-Central States . Where *"Automatic" Sprinklers* Convert Existing Expense into Capital Assets

You no doubt are fully aware of the advantages of *"Automatic" Sprinklers* as a basis of true fire protection. But, what of the element of cost? That's an important decision made, for the most part, by executives, wise in the field of finance. Those are the individuals to whom this message is directed.

Adequate fire protection must always receive primary consideration, but, do you know that approved *"Automatic Sprinkler"* systems provide, in addition to security, savings of upwards to 90% in insurance premiums? You don't have to be a wizard with figures to recognize the substantial percentage of return that's realized on your initial investment. That's the way *"Automatic Sprinkler"* systems are paid for. That's the proved method of converting an existing expense into a capital asset.

Your nearest *"Automatic Sprinkler"* representative will furnish complete details and gladly prepare a fire protection analysis for your consideration. You'll then be able to see at first hand why *"Automatic Sprinklers"* are recognized as an important investment today . . . perhaps welcomed protection tomorrow.

"Automatic" Sprinkler

FIRST IN FIRE PROTECTION

DEVELOPMENT • ENGINEERING MANUFACTURE • INSTALLATION

"AUTOMATIC" SPRINKLER CORPORATION OF AMERICA

YOUNGSTOWN, OHIO

OFFICES IN PRINCIPAL CITIES OF NORTH and SOUTH AMERICA

pendency upon other merchandise.

3. Color-educate sales personnel to the hues most wanted by shoppers that the color-intelligent buying public may be efficiently served.

4. Determine by market research the colors wanted most by customers, and provide these colors throughout interior decorative schemes to support merchandise.

Steel Production—A major development in steel-making by which carbon and alloy steel may be fabricated from the liquid phase to semi-finished shape in one comparatively inexpensive machine is jointly announced by the Republic Steel Corporation and the Babcock & Wilcox Tube Company. This eliminates from the conventional method of steel production the need for equipment for ingots as well as soaking pits and the blooming mill when relatively small quantities of steel are to be made.

A cross-section of about 30 square inches is produced at a rate of 400 pounds a minute. Continued work on this section is expected to add considerably to the rate.

The unit is at the top of a 75-foot tower to which steel is delivered from the usual electric furnaces. The molten metal is poured from a transfer ladle to an inductively heated holding and pouring ladle and from there it is poured into a funnel designed to strain out the slag. It then enters the mold where operators watch it through a mirror arrangement to ascertain that the liquid surface is clean and is functioning properly.

Below the mold the casting goes through an insulated chamber which



At the top of the tower, molten steel is poured from the transfer ladle into an induction furnace.

skylines ... by Otis



When you think of Denver extend your horizon beyond Colorado: Denver is not only a State capital, it's a commercial, manufacturing, financial, cultural and professional metropolis of the Rocky Mountain West — comprising one-third the area of the United States. What symbolizes Denver's modern pioneer spirit? Its skyline. It has a growing and thriving look. And it was made possible, in part, by Otis. How so? Skylines require elevators. In Denver, 1,133 of the 1,783 elevator installations are by Otis.

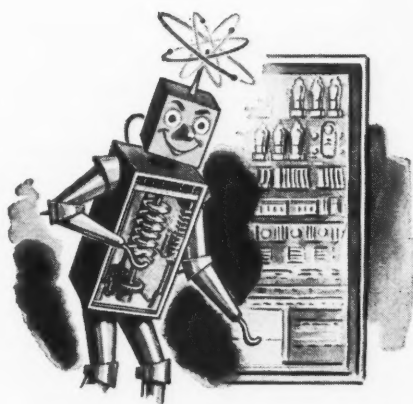
WHAT! MEN FIRST?

That's right. A man standing at the front of an elevator should get off first. He should never block the graceful exit of the fair sex.



FAST THINKER.

Meet the Otis Selector. He's the 'brain' of the modern elevator. He lights the signal. Then slows, stops and levels your car. He opens and closes the doors, too. When you're on your way, he checks off your signal. He can do 21 different tasks in a split-second. Fast thinking? Some elevators travel 1,000 feet per minute, or more.



EVERYBODY UNHAPPY?

Some complaints are easier to avoid than others. Name one? Haphazard elevator service. How to avoid it? With Otis maintenance. It's keeping 2,615 elevators in apartment houses doing the job they were built to do. Everybody's happy with safe, uninterrupted service. Want the details?



Did you know that Otis builds its own elevator motors and generators? Why? They require specialized skill in design and manufacture.



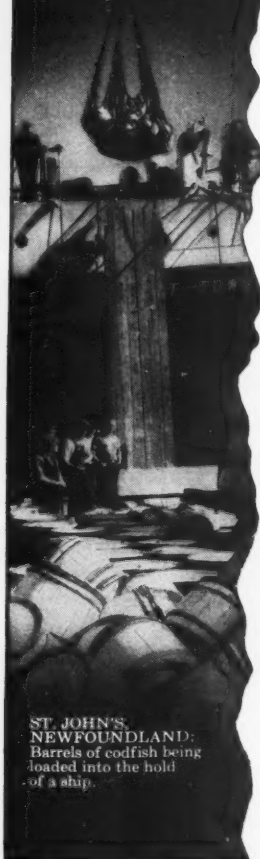
ELEVATOR COMPANY

Home Office: 260 11th Ave., New York 1, N. Y.

*In Canada and
Newfoundland..it's
The Royal Bank*



VICTORIA,
BRITISH COLUMBIA:
Douglas Street, principal
business thoroughfare.



ST. JOHN'S,
NEWFOUNDLAND:
Barrels of codfish being
loaded into the hold
of a ship.

The Royal Bank offers
United States banks and firms
a service that is continent-wide.
Branches number well over 600.
Located in highly productive farming,
lumbering, mining, fishing and
industrial areas from Victoria, B. C.
to St. John's, Newfoundland, each
branch is a valuable point of contact
in the area it serves. You will find it
profitable to discuss your Canadian
banking requirements with the
Royal Bank. Its officers can help
you to find desirable trade or
business connections, factory sites
and trade opportunities.
Enquiries invited.

THE ROYAL BANK OF CANADA

HEAD OFFICE — MONTREAL

New York Agency, 68 William St., N. Y. 5
International banking through more than 700
branches in Canada, the West Indies, Central and
South America; New York, London and Paris. Corre-
spondents the world over.

Assets exceed \$2,000,000,000

arrests and controls the speed of further cooling. A withdrawal mechanism regulates the speed of movement of the steel billet. Cut by an oxyacetylene torch to specified lengths, which can be as much as 35 feet, the cut-off sections are lowered to horizontal position by a cradle arrangement.

MILITARY

(Continued from page 19)

The statute authorizes the procurement of such supplies by negotiation, where resort to advertising and competitive bidding might require the duplication of investment or preparation previously made or might unduly delay procurement of the supplies. It relates primarily to the procurement of equipment which is the end product of a lengthy research and developmental effort. Reasonable men would agree that such an item can best be procured from the contractor who has developed it to the production stage and has thereby built up the necessary "know-how" and developed the shop practises which are essential to the mass production techniques by which intricate mechanisms of high quality are produced rapidly and cheaply.

In view of the language and purpose of this provision, it may be expected that it will receive wide application in connection with the procurement of newly developed items of strictly military application, particularly in the fields of electronics, ordnance, and aviation.

15. *Negotiation after advertising and rejection of bids:* This section authorizes the rejection of bids and procurement by negotiation where it is determined that the bids were not reasonable or were not arrived at in open competition. However, each bidder is entitled to notification of the intention to negotiate and a reasonable opportunity to negotiate. No contract may be awarded by negotiation unless the negotiated price is lower than the lowest rejected bid price and unless it

THE MARK OF EXCELLENCE ON FINE OFFICE FURNITURE



A CRESTLINE LABEL

CRESTLINE equipment has been carefully developed to meet the exacting demands of the modern office. To efficient planning and beautiful design, Security has added the vital ingredients of skillful workmanship and peak quality materials to provide you with finer office furniture for the office of today and many tomorrows.

For an individual unit or a complete office installation . . . look first to the finest . . . to equipment bearing the *CRESTLINE Label*.

SECURITY STEEL EQUIPMENT CORPORATION, AVENEL, NEW JERSEY



Getting out new catalogs?

See what this organization of catalog specialists can do for you.

Through Sweet's you can get
the **THREE ESSENTIALS**
of good catalog performance

1. DESIGN

Scientific catalog design — the complete job or as much help as you need.

2. DISTRIBUTION

Pinpoint catalog distribution to the organizations and individuals who represent the bulk of buying power in your markets.

3. ACCESSIBILITY

Assured catalog maintenance in the offices of thousands of your most important potential buyers.

Over 1,000 manufacturers whose products are bought in the construction, power or manufacturing fields now retain this custom catalog service. Before you start work on your new catalogs, it might pay you to find out what advantages it offers you.



Sweet's Catalog Service

Division of F. W. Dodge Corporation

119 West 40th Street, New York 18, N. Y.

is the lowest negotiated price offered.

The provision is designed to protect the Government against collusive bidding, follow-the-leader pricing, rotated low bids, identical bids which require award by drawing of lots, and similar practices. In its report on the legislation, the Senate cited a number of instances in which utilization of a similar power during the war resulted in substantial savings to the Government.

In addition, where bids received after advertising indicate any violation of the anti-trust laws, such bids are required to be referred to the Attorney General for appropriate action.

National Emergency Purposes

16. *Purchases in the interest of national defense or industrial mobilization:* Where it is determined that it is in the interest of the national defense that any plant, mine, or facility, or any producer, or other supplier, be made or kept available for furnishing supplies or services in the event of a national emergency, or where it is deemed necessary in order to promote industrial mobilization in the event of such an emergency, purchases may be made by negotiation under this provision.

It is based on experience gained during the recent war which makes it essential that the armed services have this power. It enables them to keep the nation industrially prepared for any emergency, by maintaining the vital elements of a munitions industry, and to take into account such factors as geographical location, avoidance of over concentration of production of a particular item in a limited number of companies, and maintenance of a basic core of facilities and skills which can be quickly expanded. Presumably this authority could be used, for example, to keep a military aircraft industry in existence, so as to avoid the necessity for building up from scratch again in the event of any future emergency.

In connection with the exercise of this power, Congress has expressly recognized that this may not be the most economic form of procurement.

17. *If otherwise authorized by law:* This provision expressly saves to the armed services any authority they may have to negotiate purchases under other legislation.

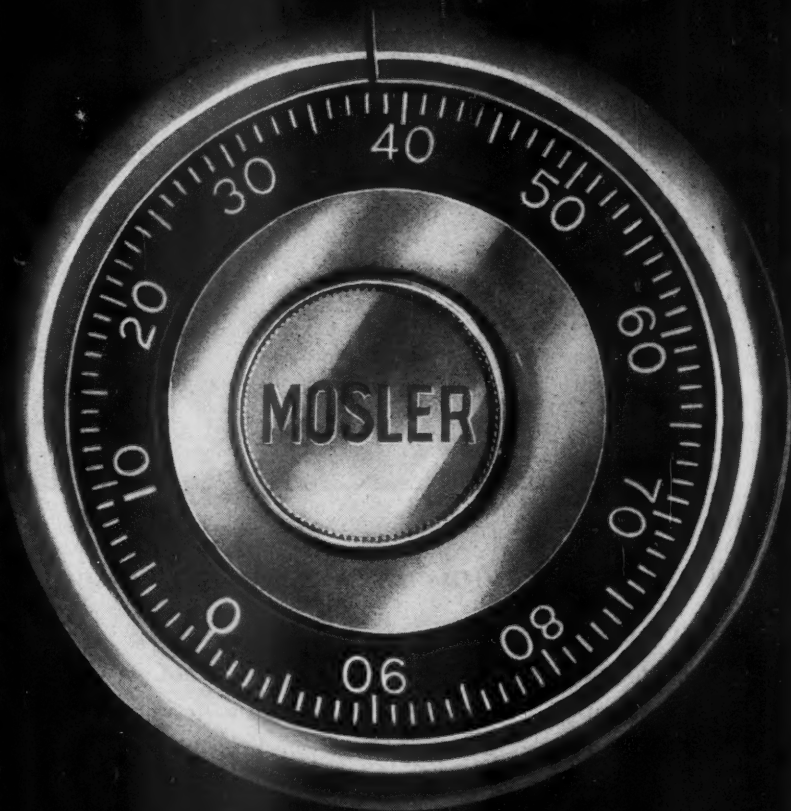
Because Congress was of the opinion

what's behind the dial?

You can't tell a book by its cover—and you can't tell a safe by its surface!

It's the part you can't see that makes a safe good . . . or bad. Do you *know* your safe has the structural strength to withstand a drop of twenty or thirty feet? It might, you know, in an actual fire.

Paper starts to char at 350°. How do you know that the interior of your safe will stay cooler than that in a fire?



there is a way you can be sure about your safe

Since 1917, the independent Underwriters' Laboratories, Inc., has been testing safes. To be approved for their "A" label, a safe must pass their severe "4 hour" trial by fire, impact and explosion. That's why when you *invest* in a *new* Mosler "A" label safe—you're investing in a lifetime of safety.

There's a Mosler "A" label safe to meet your particular requirements exactly—and you'll be amazed at how little it costs to trade in your old safe for this really *reliable* protection. Find out about it now—*before* fire strikes!

Why take chances? See Mosler now and be safe! Write for the booklet, "What You Should Know About Safes." Please address Dept. R.



The convenience of a file with the safety of a safe. Mosler Insulated Record Containers carry the label of the Underwriters' Laboratories, Inc. Complete record protection!



Mosler "A" Label Safe with burglary resistive chest for dual protection against fire and burglary.

The Mosler Safe Co.

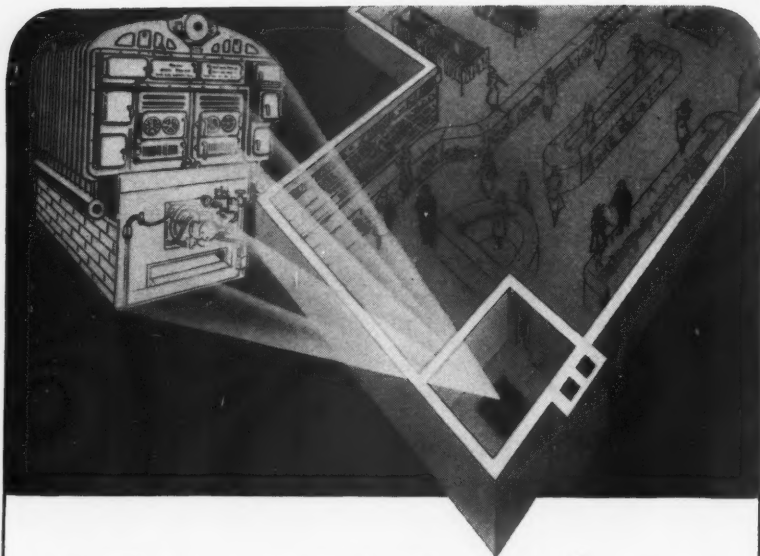


Builders of the U. S. Gold Storage Vault Doors at Fort Knox, Ky.

320 Fifth Ave., New York 1, N. Y.

Branch offices in
Boston, Chicago, Philadelphia, Pittsburgh,
Washington, D. C., Portland, Ore. and principal cities.
Factories: Hamilton, O.

Largest Builders of Safes and Vaults in the World.



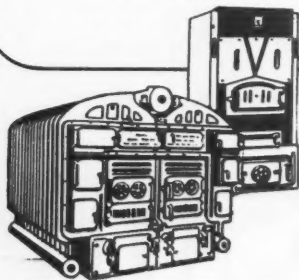
A boiler room *can* be a bargain basement

Chain stores can't take in money over counters that don't exist. *Your* business, whether commercial or industrial, can profit from a fact architects know well — that the smaller the boiler room, the greater the area you can devote to displaying, selling, or producing.

Heating engineers can often show the way to smaller boiler rooms by specifying Smith-Mills boilers — because Smith-Mills boilers are constructed of cast iron, actually deliver *more* heat than other boilers of larger physical dimensions, require less working space.

Every management should know that heating advances like this are typical of the modern H. B. Smith Co. . . . and that heating costs have a direct influence on profits.

Nationwide chains like W. T. Grant, where *volume* counts, can't afford to overlook Smith-Mills heating efficiency. This new W. T. Grant store in Syracuse, N. Y., is setting new standards in variety store operation; like over 200 other Grant stores, it paid *more* to buy Smith-Mills boilers, but pays *less* to own and operate them.



H.B. *Smith*
CAST-IRON BOILERS

THE H. B. SMITH CO., INC., 74 Main Street, Westfield, Mass.
Offices and Representatives in Principal Cities

that the competitive conditions which normally exist in the construction industry should be utilized by the Government to the greatest extent possible, it is expressly provided in this statute that no contract for the construction or repair of buildings, roads, sewers, sidewalks, mains, or similar items may be negotiated, unless the contract is to be performed outside the continental United States or unless it comes within the provisions of subsection 1, 2, 3, 10, 11, 12 or 16 of Section 2(c), discussed above.

Forms of Contract

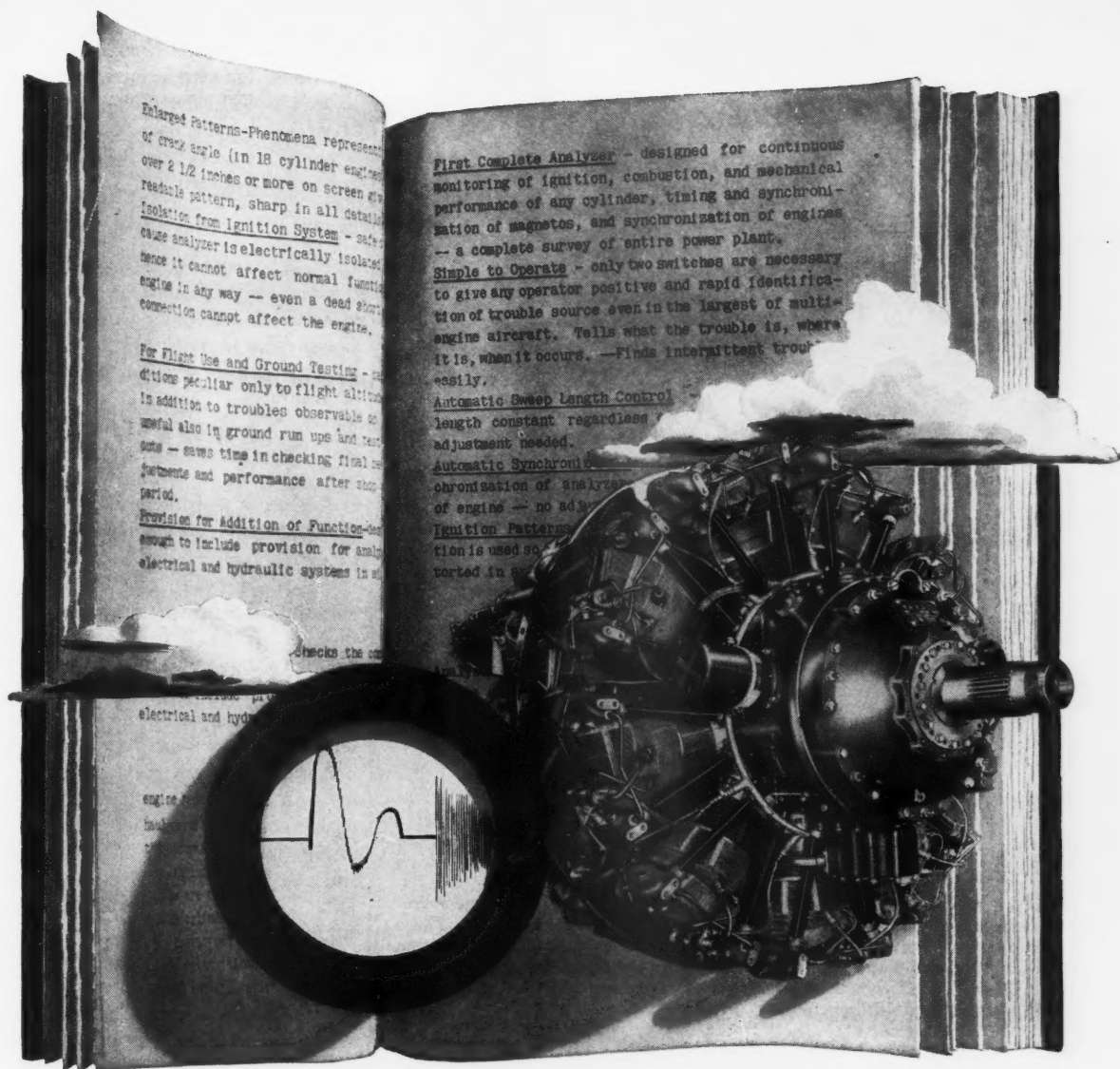
In order to properly negotiate any contract, the contracting officer must be in a position to negotiate contractual terms which particularly fit the particular situation which confronts him. The Act recognizes this. Thus, Section 4 authorizes the use of any form of contract which will best promote the interest of the Government, except that the cost-plus-a-percentage-of-cost system of contracting⁷ is prohibited. However, the cost-plus-a-fixed-fee contract⁸ is authorized, with a maximum fee of 10 per cent of the original estimated cost of the contract (except that in research and development work the fee may be as high as 15 per cent).

This authority should enable contractors negotiating contracts with the Government to protect themselves against unforeseeable risks which might affect their cost of production, without loading unto the contract price unwarranted contingency items which would improperly increase the price to the Government.

During the war the advance payment device was recognized as an extremely useful one in enabling contractors to secure funds quickly with which to perform their contracts. This statute recognizes the utility of this device by authorizing its continued availability in connection with negotiated contracts. This represents a complete innovation,

⁷ Under the cost-plus-a-percentage-of-cost system of contracting, the Government agrees to pay the contractor all of his actual costs plus a stated percentage of those costs as compensation or profit for performing the work. This system places a premium on inefficient performance and careless increase of costs because the more the contractor spends the more he receives for himself. Its disastrous effects have been recognized since World War I and its use has uniformly been prohibited since then.

⁸ Under the cost-plus-a-fixed-fee system of contracting, the amount of the contractor's fee is fixed in advance, in the light of the nature of the work to be performed and an estimate of what the total actual costs will be. Thereafter that fee does not change even though the actual costs may differ greatly from the original estimate of what they would be.



Reading Time

TWO SECONDS!

Flying Time

MORE HOURS!

READING TIME...TWO SECONDS. The Sperry Engine Analyzer visualizes aircraft engine performance as fast as that.

In the Analyzer scope, the flight engineer can examine graph-like patterns that detect, locate and identify *every* engine, magneto or ignition irregularity that occurs during flight or pre-flight check-up.

From his accurate report—covering both the nature of the difficulty and its location—the ground crew can make small mechanical corrections in minutes.

FLYING TIME...MORE HOURS. The Sperry Engine Analyzer is therefore a three-way profitable investment for the airline operator.

It eliminates the *little* engine troubles before they grow *big* and cause expensive repairs, the lost profit of grounded planes and interrupted schedules.

It improves passenger relations by assuring *on-schedule* arrivals and departures. It lowers maintenance costs, keeps planes out of the hangar and in the air.



SPERRY GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION • GREAT NECK, N.Y.

NEW YORK • CLEVELAND • NEW ORLEANS • LOS ANGELES • SAN FRANCISCO • SEATTLE

"If you'll mail the coupon, I'll write you a personal letter..."



...and I'll type that letter to you just by pressing buttons on this wonderful new Auto-typist!"

OF COURSE, I don't really type your letter *myself*. AUTO-TYPIST does the actual *typing*—three times as fast as I could do it. Here's how the new Push Button AUTO-TYPIST works.

Inside the machine there are two rolls of perforated paper tape. These rolls look like and work on the same principle as a player piano roll. On the two AUTO-TYPIST rolls there are 80 to 160 separate and different paragraphs. Each paragraph covers a different subject, so when I push certain buttons, AUTO-TYPIST *types* the right paragraphs in any combinations and in the correct sequence to produce an intelligent, individually typed reply to your inquiry.

AUTO-TYPIST stops automatically wherever I want it to stop so I can fill in names, dates, amounts, or specifications.

I "Type" 375 Letters a Day!

I'm just an average girl like you see in offices every day. But I answer all inquiries and other routine correspondence without dictation from my boss. Now, all he does is specify the right paragraph numbers that cover the subject—and I press the corresponding buttons on AUTO-TYPIST.

I can operate *three* of these Push Button machines and turn out in *one* day as much hand typing as six or seven fast human typists can type manually!

Please Mail Coupon

Send the coupon today and let me write an AUTO-TYPED letter to you. From this demonstration you can learn how and why so many of America's biggest companies now use AUTO-TYPIST for answering routine correspondence with personal letters. These letters not only increase results from sales and collection correspondence—but they cost less than 3 cents each to produce.

If you don't like to mail coupons, just write your name on a letterhead. My personal letter to you will come right back.

Mildred Emerson

The Auto-typist

610 N. Carpenter St., Dept. 410, Chicago 22, Ill.

American Automatic Typewriter Co.
610 N. Carpenter Street, Dept. 410
Chicago 22, Illinois

Attention: Mildred Emerson

Send me a personal letter Auto-typed on the Push-Button AUTO-TYPIST. Also send illustrated literature that shows different ways in which leading companies use AUTO-TYPIST to save time, cut costs, and greatly increase the effectiveness of their promotion.

Name.....

Company.....

Address.....

City.....

Zone.....State.....

since never before during peacetime has the Government been able to pay in advance for what it buys, by reason of an express statutory prohibition. However, the Act does not authorize advance payments under contracts let pursuant to advertising.

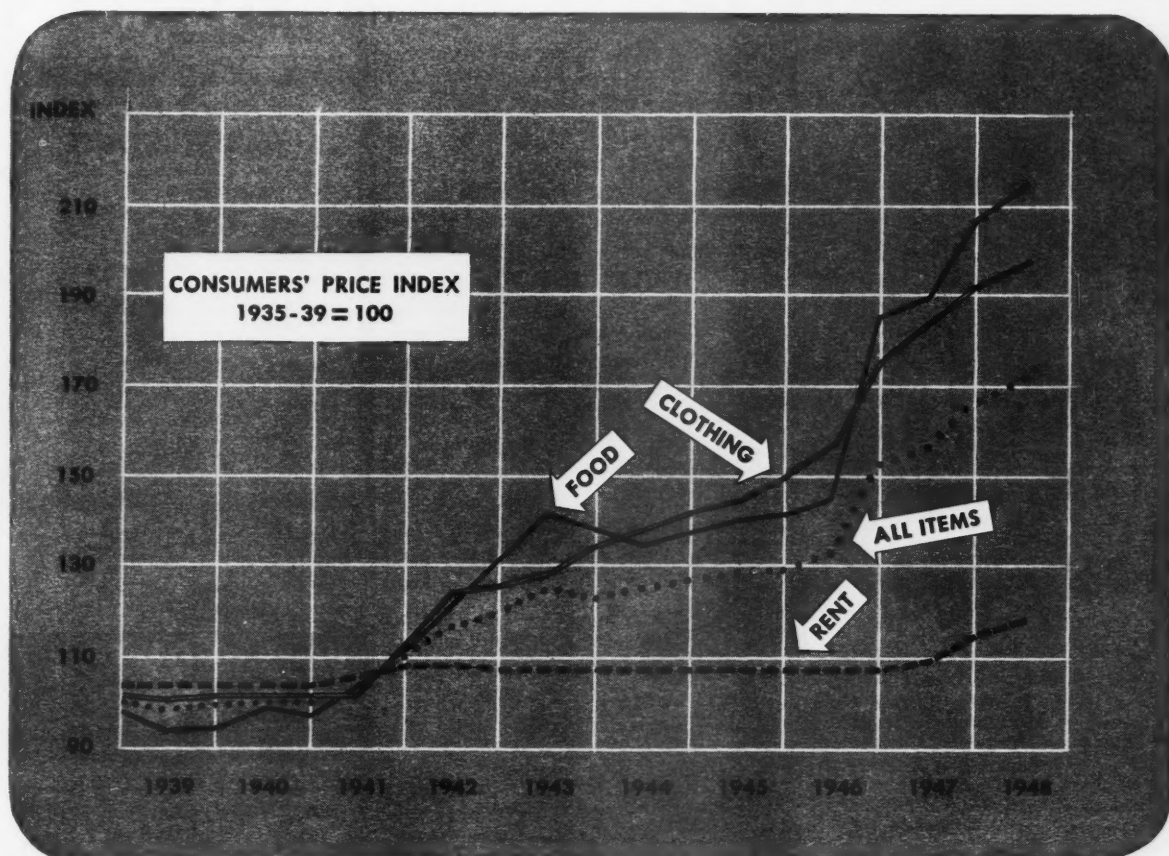
Comptroller Generals' Position

An extremely significant feature of the Act is the attempt made by Congress to define the functions of the Comptroller General and the scope of his authority in reviewing the award of contracts. Theoretically, Government contracting officers have always had the authority in appropriate cases to award contracts on the basis of factors other than price, namely, to a person other than the lowest bidder. However, as a practical matter, this has not been so, because of the restrictive administrative interpretations made by the Comptroller General of the authority of governmental purchasing officers.

In 23 *Comptroller General* 395 there is presented a typical illustration. The United States Public Health Service had previously purchased from a low bidder a color film of a particular type of medical treatment. It desired to buy 150 prints of this film, which was the only instructional film on the subject. The Surgeon General, after consulting motion picture specialists on his staff and after independent study, determined that the best interests of the United States would be served if he were to procure these prints from the Technicolor Motion Picture Corporation.

He pointed out that the drafting of specifications would be impracticable because of the difficulty of making an objective description of all the different color gradations in a continuously projected image of organs of the human body under normal and pathological conditions. He also pointed out that the Technicolor Corporation would be at a distinct advantage in any competitive bidding because of its continuous association with the making of the original film. Nevertheless, the Comptroller General ruled that bids after advertising were required in this situation. He was of the opinion that even if it were true that Technicolor would have an advantage in competitive bidding, this did not warrant the conclu-

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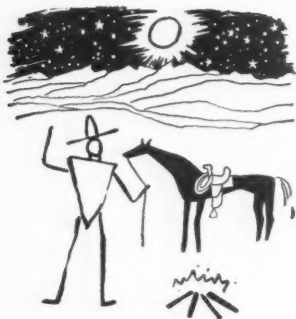
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sion that such bidding would serve no useful purpose.

It is submitted that an accounting officer of the Government should not be in a position to substitute his judgment for the judgment of a responsible administrative official in this way, particularly where the judgment of that administrative official was as well documented and carefully arrived at as it was in this case. Furthermore, it would appear that the position taken by the Comptroller General would of necessity result in the Government's paying a higher price for these prints than would have been paid had the Surgeon General been permitted to negotiate with Technicolor, since the Surgeon General would undoubtedly consider himself bound by the bids he received, in view of the position taken by the Comptroller General.

In the face of such decisions it was inevitable that there should have grown up the traditional approach of awarding contracts primarily on a lowest price basis, irrespective of whether that award was in the public interest or would result in lower ultimate cost.

Consider Other Elements, Too

What other action could a contracting officer take? Assume that a contracting officer has come to the conclusion that in a particular situation a low price is less important than, for example, quality of product, immediacy of delivery, or lower ultimate cost. Nevertheless, if he were to award a contract to someone other than the lowest bidder, he would immediately place himself in a vulnerable position, and could expect to be called upon to justify his action or even be personally charged for the apparent excess cost. This situation has had the obvious result—the award of contracts in a purely mechanical way to the lowest bidder, with no consideration as to whether elements other than low apparent cost might dictate the award of the contract to some one else.

Apparently in an attempt to remedy this situation, Section 7 has been included in the Act. It apparently was designed to embody in the statute the sound fundamental management principle of placing the authority for determining how a task should be performed with the same agency as has the responsibility for undertaking that

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*Marie Antoinette (1755-1793), Queen of France. When told that her suffering subjects had no bread, it is reported that she said: "Let them eat cake."



General Wirebound Crate



General Cleated Corrugated Container



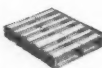
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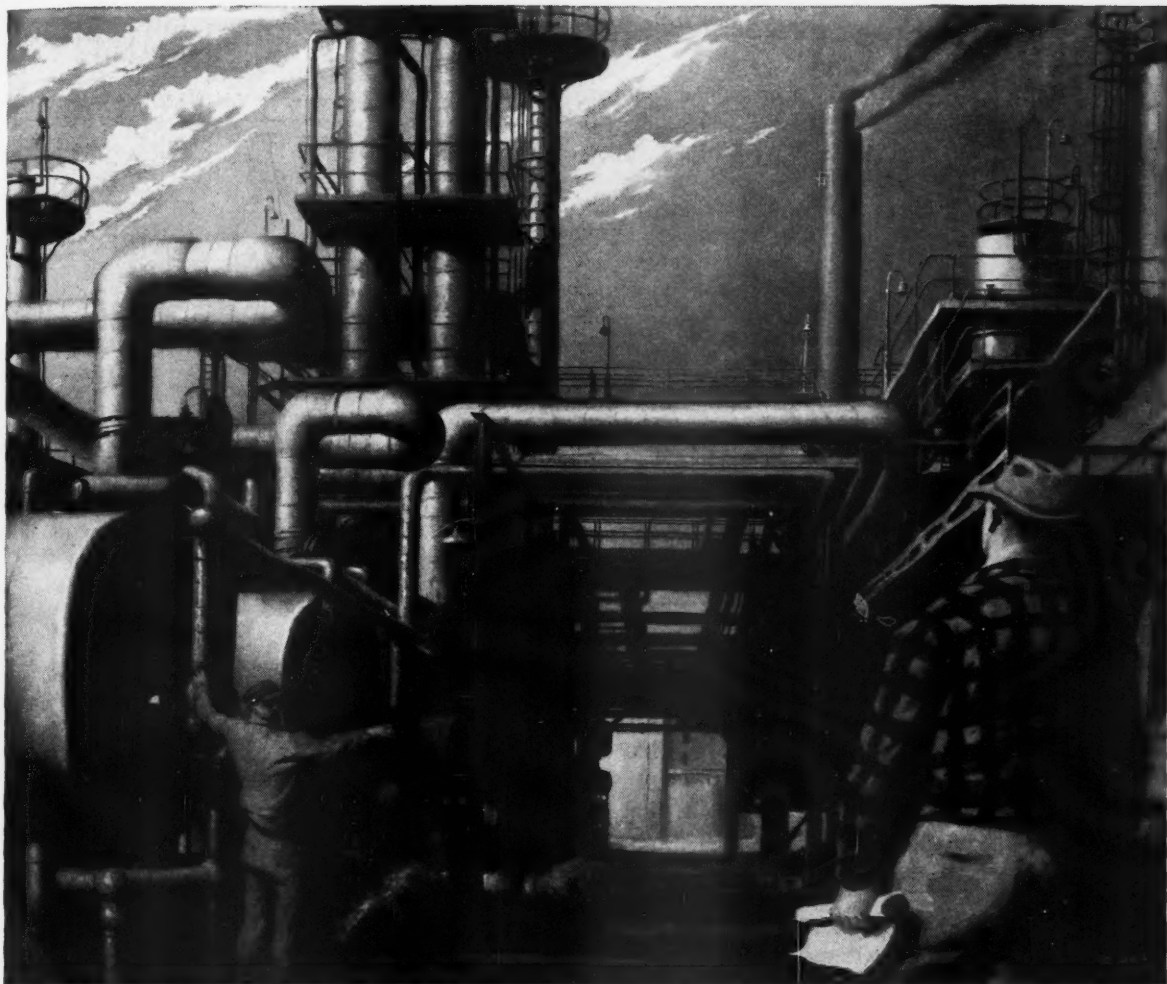
task. At the same time it contains proper safeguards to prevent the abuse of such authority.

Thus, the formal determinations which are required to bring a particular procurement within subsections 12 through 16 of Section 2(c) may be made only by a Secretary, Under-Secretary, or Assistant Secretary of one of the armed services, acting personally. When so made, such determinations are final and conclusive and may not be questioned by the Comptroller General or the courts. However, these determinations and the factual findings which support them are required to be submitted to the Comptroller General, who has been charged by Congress with the duty of reporting to it any instance in which he believes there have been administrative abuses of this authority or in which he believes there are indications that a fraud has been perpetrated upon the Government.

A Great Forward Stride

In the remaining situations in which procurement by negotiation is authorized, Congress has recognized the desirability of permitting decisions to be made by administrative officers within the armed services, but below the Secretary level. Here, however, Congress has authorized a review by the Comptroller General of such decisions as embodied in contract awards. Nevertheless, it has made it clear that such a review should not go so far as to represent a substitution of the Comptroller General's judgment for the judgment of the contracting officer. Where a contracting officer, acting in good faith, has made a determination or decision in connection with the negotiation of a contract and that decision is reasonably supported in fact and in law, Congress has stated that the Comptroller General is not to overthrow that decision but is to be bound by it.

If this principle of reposing ultimate authority in the same persons as are charged with ultimate responsibility for executing the procurement functions is adhered to, a great forward stride will have been taken. Delays in production resulting from uncertainties as to the legal status of contracts will have been eliminated. These inevitably arise when there is a possibility that a reviewing official who has no



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connection with the subject matter of the contract may subsequently rule that the contract should not have been made. Most important, procuring officials inevitably will be encouraged to rely on their own valuable judgment and experience in deciding how and to whom contracts should be given.

Procurement by the armed services to-day "is definitely a large-scale business." Its ramifications reach into all aspects of American industry and economy. Those who are concerned with the question of military preparedness would do well to study this Act. On its proper administration hangs the resolution of the question of whether we shall have adequate military supplies, both in existence and potentially, should we ever need them.

BASING POINTS

(Continued from page 14)

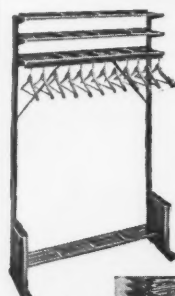
device. But, they say, in many basing-point industries, and perhaps in all the more important basing-point industries, one does not find such prerequisites. Rather he finds techniques of production that make large-scale operations very advantageous cost-wise (and thus dictate one or a few sellers at a given location). At the same time he finds an occurrence of materials causing production to be concentrated at centers widely separated both from each other and from some important markets.⁸ This combination of circumstances poses a dilemma:

(a) Under these circumstances, it is quite probable that efficient utilization of resources and optimal pricing of output would involve a system of spatial price discrimination "favoring" distant against neighboring buyers and that the resulting price to nearby consumers might be lower than a uniform f.o.b. mill price (albeit higher than the implicit base price charged to outlying purchasers).

(b) In the absence of deliberate outside action, however, such circum-

⁸ On these points, see de Chazeau, op. cit., pp. 543-546; and especially E. M. Hoover, "Spatial Price Discrimination," *Review of Economic Studies*, III June 1937, p. 189, and J. M. Clark, "Basing-Point Methods of Price Quoting," *Canadian Journal of Economic and Political Science*, November 1938, pp. 477-478.

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stances may well produce market patterns (see, for example, point 3 below) which result in monopolistic or quasi-monopolistic prices, failure to share with customers the benefits of the efficiencies thus achieved, and other consequences noted in subsequent points.

Course of Action

Precisely what the result will be in any given situation cannot be judged on the basis of qualitative considerations. Point (a) above says that imposition of uniform f.o.b. mill pricing would be certain to lead far away from the "best" result. But owing to point (b), it is not possible to state dogmatically that such action would give worse results than does the prevailing situation. Proponents, however, (1) suspect that this will be the outcome, (2) believe that in view of the great uncertainty critics should be required to make a strong case to the contrary before compelling abolition of the basing-point system, and (3) think that in any case the proper course of action is to explore possible means of realizing economies of scale in such a way that more of the benefits go to the consumers wherever it is found that they are taking the form of abnormal profits for producers. (These answers, it will be shown, apply in respect to several of the points discussed below.)

3. *The Issue of Price Leadership and Relative Price Stability:* As in other points, the debate on price leadership and relative price stability turns less upon the phenomena themselves than upon their degree and significance. Thus tolerators of the basing-point system in Steel are willing to concede that, to quote one of the most prominent, the setup "facilitates price leadership which in turn tends to minimize the frequency of price change, to maintain identical delivered prices in particular areas [and] to stabilize prices over the phases of the business cycle. . . ." But claim is made that abandonment of the system, although capable of upsetting the present leadership pattern, is not likely to make the pricing system much more competitive or to yield better over-all results. This is said to be so for the following reasons:

(a) So far as concerns the major element in the carbon steel picture

⁹ de Chazeau, op. cit., p. 553.

(namely, volume business for tonnage steel), the prime consideration is that for other than "institutional"¹⁰ reasons sellers are few and situated at a few production centers at varying distances from important markets—that is to say, technological economies of scale combine with considerations of assembly costs for raw materials to concentrate output in large plants at scattered locations. Admittedly corporate control of such plants is greater than the ideal size of plant would necessitate.¹¹ But even after elimination of such combines through, say, a "one plant-one company" rule, sellers of tonnage products would remain quite limited in number. This together with standardization of product means that the industry's pricing pattern is inherently the work of a few sellers and that not much can be done about it.¹² Any seller is aware that (at least on volume business) cuts in base prices, if known, will be met rapidly by competitors; and it is virtually certain that a cut cannot remain long unknown. In consequence, one may expect changes in the level of base prices to be relatively infrequent, occurring as a rule only in response to general and apparently "permanent" changes in demand and cost conditions, even in the absence of any artificial pricing method or overt price leadership.

(b) On the other hand, a basing-point system provides each producer with some elbow room in pricing in that it permits variation in mill nets among customers without anything like the danger of repercussions associated with direct price cuts.

(c) It is true, as indicated under point 2, page 14, the very existence of fewness of sellers, although deriving at bottom from economies of scale, trebly threatens the wholesome functioning of their part of the economy. It provides not only a strong incentive, but a strong opportunity and a strong temptation to exact an excessive fee for services. Technically, the sellers are able to establish and maintain a wider gap between prices and marginal or out-of-pocket costs than is required for the support

of effective production techniques. But the incentive, opportunity, and temptation would be there whether or not basing points were used. At best elimination of the system will lead only to moderate reduction in likelihood of retaliation and in the scope for initiative in price changes. At worst the result would be to stiffen the whole structure (that is, to remove the flexibility afforded by "right" to discriminate spatially at the cost of setting still higher and more rigid base prices). "Where oligopoly is present, neither sphere of influence nor price leadership depends upon the existence of a basing point system."¹³

Geographic Adjustments

4. *Rigidities of Location*: The charge here is that the system blocks or retards two interrelated and invariably desirable geographic adjustments: (a) that of production capacity to shifting markets and (b) that of consumers (usually fabricators) to their own markets.

This problem is one of the most obscure in the whole picture, depending as it does so much upon answers to historical questions. One can distinguish the direction of different pressures easily enough, but cannot prove very much about their net thrust. There is no doubt that a basing-point system, with the privilege it confers on each producer to penetrate non-adj-

¹⁰ de Chazeau, op. cit., p. 548. However, Dr. Corwin Edwards, Chief Economist of the FTC, seeks to distinguish cases by condemning the basing-point system only where "it is so central that its abandonment would be likely to destroy the collusion." See the September issue of DUN's REVIEW, p. 17.



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¹⁰ Such as mergers, private monopoly of raw materials, patents or any reason in fact (other than economies of scale) which would tend to block free entry.

¹¹ This judgment relates to opponents' argument that fewness of sellers in basing-point lines results in part from mergers, and so on, rather than technology.

¹² Given the behavior described in footnote 1 on p. 13, economists call this kind of setup "oligopolistic."

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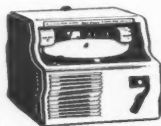
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cent markets without varying his base price, strengthens the locational pull of materials, labor, and other resources against the pull of markets. This tendency is perhaps strongest when only one base is used, but it remains effective even under a mill base scheme with freight equalization.¹⁴

A Compromise

The actual extent of this bias is a question that mere discussion of principles cannot hope to settle. The research required to do so would probably be of epic proportions. Its present lack, rather than being allowed to distract the analyst, may be used to swing attention back to the point regarded by tolerators as outweighing any probable damage from this particular fault in the basing-point principle. The real question is still, what pricing system in the industries concerned could be expected to result in the best *combination* of pulls. Clearly a discriminatory price system, because it seems the only way to realize economies of scale at locations heavily influenced by availability of materials. But no one seller can discriminate without regard to the reactions of other sellers. So reciprocal policing through a basing-point system is offered and adopted as a compromise.

A second point with respect to a basing-point system utilizing all-rail freight is that noted above, namely, it penalizes location on waterways and may positively discourage same if the material or product under consideration is an important element in fabricators' costs.

Finally, there may prove to be a complementary relationship between the location of the industry in question and

¹⁴ It is sometimes claimed that an extensive spread of basing points will neutralize this bias or render it unimportant. But see Ackley, "Price Policies" in Industrial Location and National Resources (National Resources Planning Board, Washington, D. C., 1945), pp. 308-311. It is true that in the case of sites equally well (or relatively evenly) located with respect to markets a basing-point system may stimulate dispersion of capacity (that is, non-base location)—at any rate if the new mills' production costs are likely to be higher than those of plants already situated at existing bases. For in the latter case the producer feels assured that he will not be undercut, and may also find a spot at which he can offset his operating disadvantage by the collection of phantom freight. This stimulus weakens however as bases multiply. Furthermore, there is a countervailing incentive to locate at existing bases whenever the number of basing points is restricted by industry pressure. The reason here is that a prospective producer always has the privilege of building a non-base mill, but if he is to be denied any advantages that he may perceive in making himself a base his tendency will be to settle in some already developed base area. Given freedom of any seller to establish his location as a base, it seems correct to say that a basing-point system does not itself favor location at or away from existing bases, and thus does not operate to strengthen or weaken the general reduction in locational pull of the market that is inherent in the basing-point scheme. See Ackley, op. cit., p. 313.

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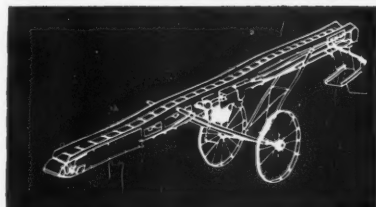
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the location of its customers. In cases where the industry's product plays a significant part in the customers' operations and location close to the product effects a significant net saving in transportation cost (because of heavy processing losses on which freight must nevertheless be paid, or of differing transport rates on materials and end-products, or both), the industry will tend to pull fabricators along with it. This will be especially the case if a good part of the fabricating losses of customers constitute raw material for the producing industry itself. On the other hand, if its customers' own freight cost to market or other cost factors (labor, other materials and components, and so on) outweigh the considerations cited above, the (basing point) industry will tend to move towards its market—and this movement, too, will tend to cumulate insofar as usable fabricating losses are significant quantitatively. All these forces, however, would be operative in the absence of a basing-point system. The effect of the latter is merely to temper their operation. All one can say with respect to location is that in some major cases (notably Steel) the system has led to a bias in favor of location at points of lower production costs rather than at markets—perhaps sufficiently strong to change the distribution of some markets themselves.

Of these points, that relating to the system's effect upon the locational pull of the market is perhaps most important, and upon analysis the tolerators' position with respect thereto is found to be much the same as on preceding questions, namely, that what we ought to be seeking is the setup that best treats consumers as a group and that from this viewpoint a basing-point system is likely to give effect to a much better combination of pulls than would a uniform f.o.b. system. (Something more will be said upon the retardation thesis in connection with the question of regional excess capacity under point 6 on page 13.)

In the third and final article of this series, Mr. George will outline the answer of professional supporters of a basing-point system to the remaining charges against such a scheme, summarize the whole debate and discuss some concrete alternatives to the system in its usual form other than resort to uniform f.o.b. mill pricing.

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BRITAIN

(Continued from page 16)

out the organization when profits, owing to controls, on 40 per cent of pre-war output were greater than on the full output of pre-war. It was not easy for managers to press for economy when the public would pay any price, and order books were full for two and three years ahead. In many instances future orders have fallen within a few weeks from three years to a few weeks. So much for tonic.

What about slump? There is no doubt that there are many goods now freely on the market that have been short for many years: electric goods and household equipment, plate glass, tennis balls, textiles, radio equipment, magazines and book stall literature, and even, it is reported, beer. Receipts of motion picture theaters and so forth have fallen 30 per cent in one town. Secondhand furniture has been halved in price. Houses costing \$25,000 to \$36,000 have fallen \$2,000 to \$4,000. Houses had risen to more than three times pre-war value. \$4,000 per bedroom was tending to become a low figure. It is difficult to deduce what is happening. Partly, there is an increasing shortage of money, but then there is much more discrimination on the part of the public in its buying.

We have had rationing so long that nobody knows what the public really desires. Officials do not seem to care. It is extraordinary how impossible planning is when there is no free market. How is one to judge what should be provided? Furthermore, some industries have been almost ruined by a sudden increase of the purchase tax to 66 $\frac{2}{3}$ per cent. In the radio industry the effect on sales has been so drastic, the government has decided to remove part of the purchase tax. But the harm is probably done; the flow of trade has stopped and men are rapidly being dismissed.

* Last October the government decided, in order to increase exports, to shut down to a certain extent, production of food, tobacco, housing, and all of the industries relating to them. This is the cause of most of the reduction in the number of operatives in so many factories and is not in itself a slump.

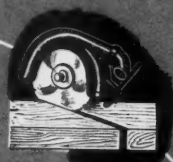
The government hoped that, thereby, employees would move to high pri-



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ority industries. They have done so to a relatively minor extent and now a further pronouncement of government is expected.

It is cheaper to move factories to the homes of workers than to move workers. Textile factories are being created in many places outside the traditional area.

There seems to be no one in the country—economist, financier, financial editor, or industrialist—who can say with tolerable certainty to themselves what is happening. Certainly, there is general appreciation that there is a change taking place. Whether unemployment will grow rapidly and to what extent and when, nobody can give a reasonable answer.

Finance

One issue is becoming clear. Money is scarce. The probable average increased cost of plant over pre-war is 280 per cent. High taxation makes it much less possible to provide funds for replacing existing plant, much of which has been increasingly worn out in the last ten years. Companies are considering the issue of shares and debentures. Overdrafts and bank advances are rising rapidly, companies are using bills for paying their debts. In many instances, they are reducing the volume of inventories and reducing the amount of capital tied up in long period manufacture. Now that some supplies are easier, suppliers are pouring goods under contract into factories sometimes ahead of time. Such factories may be selling the supplies at a loss as fast as they arrive, because they fear a further fall in price. Indeed, the general attitude of companies is that they are more concerned about falling prices than loss of sales volume.

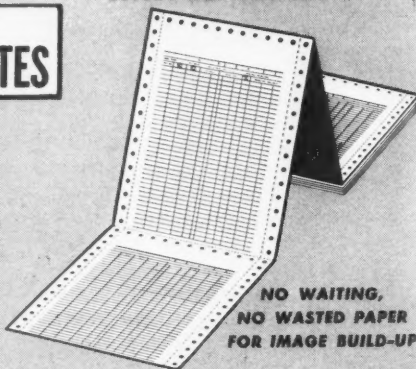
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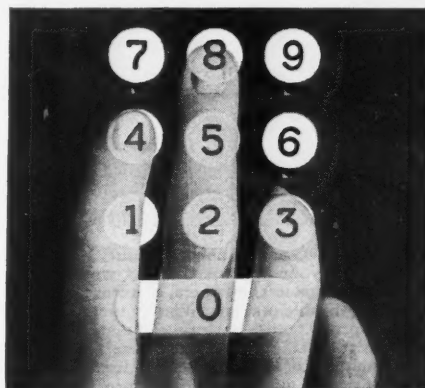
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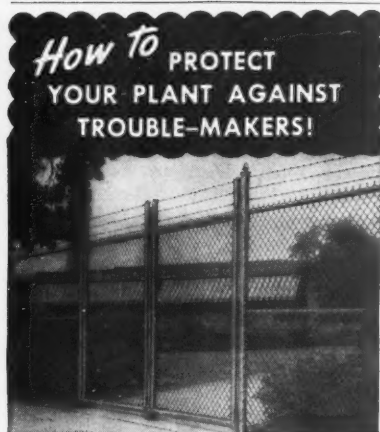
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Investments

Government stocks issued a few years ago have fallen from 100 to 75 and the return of interest is only $2\frac{1}{2}$ per cent, so investors have lost not only capital but revenue. Now the standard interest rate is rising to slightly more than 3 per cent. The rules for investment in this country are commonly governed by the Trustee Acts which closely limit the range of investments. Many of the investments allowed were in organizations that have been nationalized and consequently the fund may have lost 20 per cent on capital and the interest may have fallen to about one third.

This is serious. Where shall companies turn for investment at the present time? They are turning heavily to mortgages; but mortgages are less easy to find. They yield $4\frac{1}{2}$ per cent per annum and often the capital sum is being paid back each month. The risk becomes less and less with time, provided, of course, that new mortgages are not taken up. Employees are short of houses and, whereas the vital need in a pension fund is to insure its stability and its income, pension funds have been able to invest large sums in mortgages of houses of employees. This is a new phase and is helping the welfare of the business for which the fund has been created, although this cannot be the main consideration.

It will be realized from all that has been said that the country is learning a great lesson in economics. The government quite rightly is desperately anxious to avoid unemployment, but full employment has meant gradual increase in wages. The gradual increase in wages has gradually increased costs and may involve loss of export markets, although so far import prices have risen



**Drive Carefully . . . The Life You Save
May Be Your Own*

"Your Unseen Friend" . . . rides with them in

The Bus that brings them Home

When Jeanie and Johnny, so happy and gay
Start headin' toward home after school every day
They're guarded by signals (some red and some green)
By real friends in need, both the seen and *unseen*.

There's the trustworthy driver who sees they get there
There's the monitor stern who sees they take care.
There's the school bus itself . . . with its non-slipping floors
And its safety-glass windows and safety-catch doors.

While deep down inside of the heart of the bus
Is another good friend of each one of us.
It's the Nickel that helps make the axles and gears
Much stronger and tougher and safer for years.

And the Nickel in brake drums fights wear and tear,
And the Nickel in steering gear checks danger there.
Yes, from front end to rear, *friendly Nickel's* the rule
For buses that bring children safe home from school.

In hundreds of ways Nickel serves you *unseen*
In radio, sink and in threshing machine.
Although you don't *see* it, you always depend
On this metal that's known as "*Your Unseen Friend*."

* * *

*The interesting story of Nickel, from ancient discovery
to modern-day use, is told in an illustrated
60-page booklet, "The Romance of Nickel." Write for
your free copy today. Address Dept. 207X.*

THE INTERNATIONAL NICKEL COMPANY, INC.

New York 5, N. Y.

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...Your Unseen Friend

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Want to get your sales message across to more prospective customers . . . for less money?

Want to hit them more frequently with attractive, forceful advertising literature without wrecking your advertising budget?

You can do all this . . . at low cost . . . with a Davidson Dual Duplicator . . . right in your own office. For instance, with your Davidson you can produce advertising folders, booklets, mailing pieces, in one or more colors . . . with illustrations in halftone or line from photos or drawings. You can produce your own letterheads and envelopes, sales bulletins, form letters, price lists, post cards, blotters. You can imprint dealers' names and addresses on your advertising literature. And all at a fraction of the usual cost.

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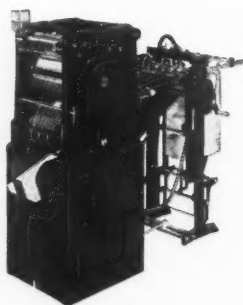
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Davidson Sales and Service Agencies are located in principal cities of the U. S., Canada, Mexico and abroad.

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DUPLICATORS • PAPER MASTERS • OFFICE FOLDING MACHINES • SUPPLIES
A GENERATION OF EXPERIENCE IN THE MANUFACTURE OF OFFICE EQUIPMENT

far more rapidly than our export prices. Thus, the government is in a great dilemma. Can it reduce costs without creating unemployment?

Cricket is still a great national game. Here it is a rule of life almost to give a man a fair inning. The opponents of nationalization have been remarkably quiet. But opinion, even in the government, trade unions, Houses of Parliament, and among the general public is crystallizing. New schemes are more heavily opposed and criticized.

Nationalization

Coal has now been nationalized for eighteen months. The first accounts are out. In spite of a heavy increase in price the loss for last year is 50 cents a ton. Thus prices will have to increase substantially again. Stoppages of work in 1947 after nationalization were twice as great as in 1946. Mechanization, on which millions have been spent, is not increasing production. The Minister who introduced the Nationalization Bill to Parliament has now openly stated that the government was not prepared. Sir Charles Reid has told the world that vast changes must be made in the policies of the Coal Board to get the scheme to work. Workers are not satisfied. Probably no one is.

In February and March 1947 there was a great breakdown. Early in the Winter of 1947-1948 staggered hours were introduced and remained until May. This commonly meant fewer hours of work. The Winter was mild. We got through. But already in June 1948 the government had more than once expressed much concern about coal and electricity supply for the Winter 1948-1949.

Workers are bewildered. What does nationalization mean for them?

There are many socialists and trade union leaders who now say openly in small but not public gatherings that we shall not get coal until wages come down!

Britain's position as a world mining center is weakened by nationalization.

But there is no doubt in any one's mind but that nationalization means increased cost.

The value of the Liverpool Cotton Exchange is being slowly realized. The government abolished it as unnecessary

(Continued on page 67)



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NOTE: Inquiries as to rates for listings on this page should be addressed to Charles E. Darby, Canadian Advertising Representative, Dun's Review, 159 Bay St., Toronto, Ontario, Canada; or any office of Dun & Bradstreet of Canada, Ltd. P. O. Box Numbers indicated by (B xxx).

Accounting

CLARKSON, GORDON & CO., Chartered Accountants, 15 Wellington Street, West, Toronto 1, Montreal, Hamilton, Winnipeg & Vancouver.
 WILTON C. EDDIS & SONS, Chartered Accountants. (Est. 1895), 85 Richmond St., W., Toronto 1, Ont.
 EDWARDS, MORGAN AND COMPANY, 10 Adelaide St., Toronto. Offices also at Montreal, Winnipeg, Vancouver, Timmins and Calgary.
 GRIFFITHS & GRIFFITHS, Chartered Accountants, Royal Bank Bldg., Vancouver, B. C. Tel. Tatlow 1161.
 ISMAY, BOISTON, DUNN & CO., Victoria, B. C., Chartered Accountants. 305-7 Pemberton Building. Telephone Garden 3732.
 MILLAR, MACDONALD & CO., Chartered Accountants, Winnipeg, Man. and 4 Albert St., Toronto, Ont.
 NASH & NASH, Chartered Accountants, 603 Tegner Building, Edmonton, Alta. and Grande Prairie, Alta.
 RICHARDSON & GRAVES, Chartered Accountants, Lancaster Bldg., Calgary, also Medicine Hat, Alta.
 ROBERTSON, ROBINSON, McCANNELL & DICK, Chartered Accountants. Sterling Tower Bldg., Toronto, Tysler Bldg., Chatham, Ont.
 P. S. ROSS & SONS, Chartered Accountants, Montreal 1, Que., Toronto, Winnipeg, Calgary, Vancouver and Saint John, N. B.
 THORNE, MULHOLLAND, HOWSON & McPHERSON, Toronto, Kitchener & Galt, Ontario. Rep. throughout Canada & United States.
 WILLIAMSON, SHIACH, SALES, GIBSON & MIDDLETON, Chartered Accountants, 66 King St., West, Toronto 1, Ontario Ad. 7385.

Advertising

MCKIM ADVERTISING LIMITED. Complete advertising agency service. Offices: Montreal, Toronto, Winnipeg, Vancouver, London, England. Address: James Baxter, President, 320 Bay Street, Toronto 1.

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 McCARTER & NAIRNE, Architects & Structural Engineers, 1930 Marine Building, Vancouver, B. C. Building Investment Counsel.

Automotive, Aircraft, Transportation Equipment
 CHASSIS AUTOMOTIVE PRODUCTS, Montreal 3. Spring shackles, steering and chassis parts. Worldwide distribution. Agents wanted.

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BLAICKLOCK BROS., LIMITED, 307 Common St., Montreal. Established 1876. Customs-brokers, warehousemen and forwarding agents.
 LEITH AND DYKE, LIMITED, 325 Howe Street, Vancouver, B. C. Established 1894. Customs Brokers and Forwarding Agents.
 SEABOARD BROKERS, Halifax, Nova Scotia. Customs brokers. Specializing in forwarding imports, exports and in-transit shipments.
 THOMPSON AHERN & CO., 40 Yonge St., Toronto, Ont. Custom house brokers and forwarders. Suppliers of import and export invoice forms.

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BRIGGS & CO., LTD., Halifax. Branch Sydney, Nova Scotia. Complete sales coverage wholesale and retail grocery trade in Nova Scotia.
 W. H. ESCOTT CO., LTD., Winnipeg, Man. Groceries, hardware, drugs, etc. Cover all Canada.
 JACK FROST SALES LTD., (B 10), Saint John, N. B. Grocery brokers and mfrs. agents. Importers. Distribution N. B. and P. E. I.
 VINCENT BROKERAGE CO., Halifax, N. S. Branch Saint John and Moncton, N. B. Active sales coverage, food and allied lines, Maritime Provinces.

General Merchandise Distribution

PARR & CO., H. J. (B. 694), London. Whol. dist. genl. hdwe., household appl., plugb. fixtures, oil htg. and elec., gas and liquid gas ranges.
 TAF DISTRIBUTING INCORPORATED, 455 Craig St., W., Montreal. Specializing in general merchandise distribution throughout Canada. Appliances, furniture, hardware, smallwares, textiles, etc.

Hardware, Sporting Goods, Radio, Electrical and Household Appliances

ELECTRICAL WHOLESALERS LTD., Calgary. Desire radio, major appliances, commercial refrigeration. Exclusive Alberta distribution.
 HICKMAN TYE HARDWARE CO., LTD., Victoria, B. C. Complete B. C. coverage. Whol., hardware & electrical goods. Branch Whse., Vancouver.
 FRED C. MYERS LTD., Vancouver, B. C. Wholesale hardware, electrical appliances. Ten travellers. Full coverage British Columbia.
 RONBE EXPORTING CO., Winnipeg. Desire Canadian representation, electrical goods, sporting goods, promotional merchandise.
 SHEFFIELD BRONZE POWDER CO., LTD., Toronto. Household paint and hardware specialties. Complete Canadian detail distribution.
 WM. STAIRS, SON & MORROW, LTD., at Halifax, N. S. Since 1810, with branches Sydney, Nova Scotia, Saint John, New Brunswick, invite submission new lines suitable for hardware and general store outlets, contractors, plumbing and heating trade, shipbuilding and manufacturing industries. 25 salesmen insure you complete coverage of the Maritime Provinces markets.
 W. H. THORNE & CO., Saint John, New Brunswick. Wholesale jobbers, hardware, tools, sporting goods, silverware, cutlery, kitchenware.
 THE W. H. THORNHILL CO., LTD., 433 St. Helen St., Montreal. Manufacturers' representatives, importers and distributors hardware, small tools, cutlery, household goods and wheel goods.
 WOODS WESTERN LTD., Calgary. Business established 15 years. Interested in any line sold to general trade, chiefly hard lines.

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CHEMICALS LIMITED, 384 St. Paul, W., Montreal. Importers and distributors; industrial chemicals, raw materials for industry throughout Canada. Interested in representations and offers.
 SHANAHAN, LTD., Vancouver. Also Calgary and Winnipeg. Western Canada distributors, industrial chemicals and raw materials.
 CHARLES ALBERT SMITH LIMITED, 123 Liberty St., Toronto. Representing manufacturers for selling in Canada bulk chemicals, chemical specialties to industry and pharmaceutical manufacturers.

Investments

RENE-T. LECLERC, INC., 240 St. James St., W., Montreal. Corporate financing of U. S. branch plants in Province of Quebec.
 WALKER & WORSLEY, LTD., Vancouver. Apartments, ranches, resorts, homes, mortgages, insurance, securities, deposit boxes.

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 CAMPBELL, MURRAY & CO., Barristers & Solicitors, Hall Bldg., Vancouver, B. C. Tel. Marine 5331.
 DAVISON & GODWIN, Barristers & Solicitors, 436 Barrington St., Halifax, Nova Scotia. Tel. 3-7201.
 DILTS, BAKER, LAIDLAW & SHEPARD, Barristers, etc., Huron & Erie Bldg., Winnipeg, Man. Tel. 93-416.
 FASKEN, ROBERTSON, AITCHISON, PICKUP & CALVIN, Barristers, etc. Excelsior Life Bldg., Toronto 1.
 FENERTY, FENERTY & MCGILLIVRAY, Calgary, Alta. General Practice and Corporation Law.
 GOWLING, MacTAVISH, WATT, OSBORNE & HENDERSON, Barristers, etc., 56 Sparks St., Ottawa, Ont.
 INCHES & HAZEN, Barristers & Solicitors, 23 Royal Securities Bldg., Saint John, New Brunswick.
 LACOSTE & LACOSTE, Lawyers, Barristers, Solicitors, etc., 221 St. James St., West, Provincial Bank Bldg., Montreal, Que., La. 7277.
 McMASTER, MONTGOMERY & CO., Barristers, Solicitors, etc., 902 Temple Bldg., Toronto 1, Ont.
 MONTGOMERY, McMICHAEL, COMMON, HOWARD, FORSYTH & KER, Barristers and Solicitors, Royal Bank Building, Montreal 1, Que.
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Machinery, Metal Products, Farm Equipment

COUTTS MACH. CO., LTD., Edmonton, Alta. Mfrs. sawmills, truck grain loaders. Distributors farm and industrial machinery. Seek tractor.
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 WESTMINSTER IRON WORKS CO., LTD., New Westminster, B. C. Mfrs. logging machinery. Exchange mfg. rights general machinery.
 WILLARD EQUIPMENT, 860 Beach Ave., Vancouver, B. C. Machinery dealers, building supplies, importers, exporters. (Estab. 1919.)

CANADA CALLING U.S.A. (Continued)

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BARNEY ADLER & SONS, INC., 1260 University St., Montreal. Have established Canada-wide connections jewelry and giftware trades. Seek, from manufacturers only, exclusive representation in silverware, pewterware, fancy china, plastics. Original designs.

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DURO-LITE PRODUCTS OF CANADA LIMITED, Calgary, Alberta. Seek Canada-wide distribution, electrical, automotive and hardware lines.

H. HACKING CO., LTD., Vancouver. Nation-wide distribution. Seek kitchenware, pottery, mechanics' tools agencies. Ten branches.

MackELVIES LIMITED, Winnipeg. Seek agencies grocery, drug, light hardware, novelty, toy lines. Covering Western Canada.

HAROLD F. RITCHIE & CO., LTD., Toronto. 45 salesmen cover drug & grocery trade all Canada. Services, storage, billing, collecting.

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Novelties, Leather Goods, Advertising

J. C. S. VARCOE, 45 Yonge St., Toronto. Can provide Canada-wide distribution, advertising novelties of all kinds; gifts, premiums for every occasion. Sales promotion by means of merchandise.

Textiles, House Furnishings, Apparel

BUCKWOLD'S LTD., Saskatoon. Importers, distributors, textiles, work clothing, ladies', men's, children's wear, floor coverings.

MISCELLANEOUS Insurance

CARDINAL & MELOCHE, 233 Notre Dame Street, West, Montreal. Desire General Agency for Casualty or Fire Insurance Companies.

Smallwares, Lamps, House Furnishings

GENERAL SALES CORP., LONDON. Ontario dist. household electrical appliances, specialty hardware and wheel goods. Warehousing facilities.

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PECKOVER'S LTD., Toronto. Warehouses across Canada. Interested in agencies plastics, stainless accessories, specialty metals.

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in the **Dun & Bradstreet**
STATE POCKET EDITION
of the Reference Book

**Covering
all
sales
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Write for State list and order blank
from nearest office of
DUN & BRADSTREET, INC.

but now no manufacturer is happy about his position. He cannot be forward. He cannot even obtain the qualities of cotton he desires. Before the war cotton rarely changed as much as one penny per pound in a day but now in four months prices have increased 100 per cent and even 160 per cent for some grades. Firm prices for finished goods cannot be quoted to customers. Money must be found somewhere to finance the business.

Supplies

Although consumption of food per head is so much less than pre-war, the government foretold months ago a cut of 200 main calories per day but this did not happen in the first half of the year. Mr. Roy Harrod has computed the minimum fall of standard of life, taking the rosier view, as 14 per cent on pre-war. The government promises no improvement. The population has increased but where corn consumption is 11 per cent of pre-war, sugar is 84 per cent. No rice is imported for food. Meat is rationed at 16 cents per person per week. It is easy to deliver the meat ration for two through the letter box on the door. Indeed, it is often delivered that way. It really is not much Cotton consumption is 64 per cent of pre-war.

But the supply position will be determined before long by the ability to export. Thus, it seems increasingly likely that imports will be cut and this in turn may reduce exports.

If we wish to be cheerful we must look ahead; 1948, 1949, and 1950, at the moment, offer little joy. By 1952 things may be different; the result of brains and effort, research, hard work, much training, and an improved discipline may yield really great rewards. There is always this blind faith, this unreasoned belief which is our mainstay.

Taxation remains so high that everyone in private or public life must consider the tax angle of every business dealing. Will purchase tax go higher or be reduced? Capital appreciation is not taxed and investments which appreciate in value are more important than those which return high dividends.

Power has been passed to the hands of operatives from the middle classes. Much of what is happening can be explained this way. The Trades Unions



Slips were chronic with this large organization. In 40 months, 283 workers fell on its slippery floors, which were slicked up with wax. Management wanted gloss, but no loss. So they called a Legge safety engineer. "Your slip was to assume polished floors have to be slippery," he said. He proposed a Non-Slip floor upkeep plan with the Legge System.

The slips dropped 95%... the floors shone... and costs fell 32%.

Plain Talk about Safe and Sane Floors

FREE... our booklet, *Mr. Higby Learned About Floor Safety the Hard Way*. Strips the mystery from floor upkeep. Tells how the Legge System:

(1) engineers care to floors; (2) supervises your crews; (3) gives Non-Slip safety endorsed by leading insurance companies. To send for it without obligation, clip coupon to your letterhead. *Walter G. Legge Company, Inc., New York 18, N.Y.* Branch offices in principal cities.



LEGGE SYSTEM of Non-Slip Floor Maintenance

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Please send me your free "Mr. Higby" book.

Signed

Title

Type of floor

Area sq. ft.

D-A1



HELP relieve Telephone Tie-ups instantly with Executone Inter-communication!

"INSIDE" PHONE CALLS cause switchboard snarls! They delay important calls from customers—make expensive "call-backs" necessary—keep everybody waiting for lines.

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Without obligation, please let me have—

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set up the Labor Party, but they lost their grip in large measure during the war. Their great leaders have become ministers or government officials. Workers feel the need of the sense of power more than the need for real goods and services for the present. Economic argument cannot move them.

Is this phase partly temporary? Can workers use their power properly?

Our industrial democracy was developing wonderfully on sound lines before the war. War upset soundly based arrangements. We are probably recovering somewhat but the party political issue has brought many industrial matters into the political arena and it is less easy to cope with them. Industrialists fight shy of politics and rightly so.

PRODUCTIVITY

(Continued from page 22)

modestly since the end of the war, but the exact extent remains uncertain because of the fragmentary nature of the data available.

Considering the vital significance of productivity, and its importance in determining policy for the future, it is surprising how little concrete statistical information we have about it. For some segments of the economy, such as rail transportation, mining, and electric power production, where an essentially unchanging job is done, satisfactory data are available. In manufacturing, on the other hand, figures are scanty and imperfect.

Perhaps the reason for this is, in part, that we have normally tried to derive productivity data as a by-product of the collection of production and employment statistics for other purposes. During periods when the pattern of production changes rapidly, as in the war and post-war periods, the comparability of separately collected production and labor statistics tends to break down, and inferences regarding productivity can no longer be properly made from the limited data at hand. Of course, it is in just such periods that we are



New Advertising Machine

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1¢ POST CARDS

CARDMASTER CO., 4546 Ravenswood
DEPT. 1210, CHICAGO 40, ILL. **FREE!**

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* Shows HOW thousands of business men in every line are boosting sales in spite of conditions with 16 messages printed and illustrated in few minutes on gov't post cards—with amazing, new patented CARDMASTER. Your "today's" ideas, read by your prospects next morning. Not a toy, but a sturdy advertising machine built to last years. Sold direct at low price. Guaranteed five years. SEND NAME TODAY. All FREE!

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

This Year Give Brownell Holly

Send greetings of good will to prized friends and business associates with waxen, richly bermed Oregon grown holly... in full-foliaged sprays or fashioned into holly wreaths. Highly personal, always in good taste, always appreciated.

Beautifully packaged... shipped prepaid in sturdy cartons, together with your personal greeting. Safe delivery guaranteed anywhere in U.S. For \$5 your choice of 16' wreath with sprays, or box of sprays only, size 28"x11"x5. Other packages from \$2.50 to \$15. Air delivery within a few hours slightly higher. Literature and price lists sent gladly upon request.

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MILWAUKIE, OREGON

40,858 MANUFACTURERS

DUN'S REVIEW REACHES THE PRESIDENTS AND TOP EXECUTIVES OF 40,858 MANUFACTURERS.

GLOBE SPRINKLERS

THE AUTOMATIC FIREMEN

THE FIRST FIVE MINUTES

More can be done in the first five minutes after a FIRE starts than in the following five hours. The time to fight a FIRE is when it is small.

GLOBE Sprinklers are always ready to take advantage of those first five minutes. **GLOBE AUTOMATIC SPRINKLER CO.** New York, Chicago, Philadelphia • Offices in nearly all principal cities



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Forty years ago forest conservation was a new idea. Today scientific forest practice is a reality.

Ray S. Ferguson
PRESIDENT



The World's Greatest Salesman **..... IS THE PRINTED PAGE**

WHEN words are printed on paper—they take wing! Swiftly, economically, they fly across the land, reach the nation, deliver their idea. That printed page may be the leaf—thin and mighty—of a Bible. It may be a magazine editorial reaching millions. Or a catalog, to bring some wistful girl her dream.

ST. REGIS, with its vast facilities, its \$80,000,000 invested in mills and plants and timberlands, is constantly making technical advancements for increased brightness, opacity and improved printability of its paper. This is our particular part in giving the printed page the qualities that free the message for its full import.

ST. REGIS PAPER

Company

230 PARK AVENUE, NEW YORK 17, N. Y.

sales and credit managers

When your distributors, jobbers and wholesalers need money to finance the purchase of your merchandise, recommend an inventory loan secured by Douglas-Guardian warehouse receipts.

Large corporations are enthusiastic about our procedure for helping their customers to borrow on inventory. We issue warehouse receipts on merchandise right on your customers' premises. Banks in every part of the country are eager to lend money to your dealers on our field warehouse receipts. This means prompt payments for shipments — fewer credit risks — more sales to more dealers, without tying up additional company funds.

Write today for booklet giving complete details.

DOUGLAS-GUARDIAN WAREHOUSE CORPORATION

50 Broad Street, New York 4, N.Y.
Please send me booklet "Profits on Your Premises" which explains how distributors, wholesalers and jobbers can borrow on inventory.

Name _____

Title and Company _____

Address _____

DR-10-48

most interested in the trends of productivity.

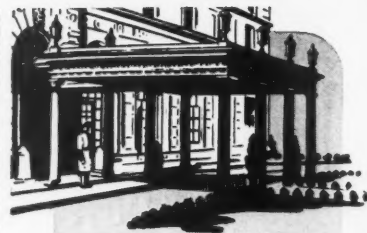
Because of limitations inherent in the conventional methods, the Bureau of Labor Statistics several years ago inaugurated a program of collecting productivity data directly from a cross-section of the producers in selected industries. This direct approach to the problem also permits the collection of collateral information of an interpretive nature, and makes possible the classification of plant reports on the basis of factors which may serve as important determinants of productivity levels and trends. With this technique it has been possible to extend productivity measurement into important areas of manufacturing activity never previously covered.

Significance of These Studies

Only a small number of industries have as yet been covered by this new series of studies, and consequently little information bearing on the question of general trends has so far become available. However, these studies, though limited in number, have nevertheless provided considerable insight into conditions governing current levels of productivity, and thus have significance beyond the limits of the specific industries to which they refer.

An important observation from these studies is an almost universal divergence between trends for direct labor man-hours expended per unit produced and for indirect (or factory overhead) man-hours per unit. These trends for the construction machinery industry are in the chart on page 21. By its nature, direct labor required per unit is not ordinarily subject to any great amount of short-term change, and it is chiefly influenced by some form of technological adjustment. Within broad limits, direct labor required per unit showed little change or decreased during the war and post-war years in most of the industries studied. The decreases which occurred were due in most instances to such technological changes as improvements in equipment, factory methods, work techniques, or the organization of production, and in many cases were associated with increases in production volume.

In contrast, factory overhead labor expended per unit of output rose quite



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"... It took the Big Snow to soften up Smartypants!"

HYPE KILVERN still talks about it! Remember the Big Snow? That night—snow still coming down—I went down to the Main Post Office to send off a registered letter for the Mrs. Met Hype coming in—he's Assistant Postmaster here. As we crossed the lobby I heard my name called. It was Smartypants!

Miss Pantz, first name Philomena, was Smart Chemical's office manager. Smartypants, get it? She's big, beautiful, blonde, a Phi Beta, a Lieutenant in the Waves during the war—almost too much for one woman! And don't think she didn't know it!

A week before, I had tried to sell her a postage meter for Smart Chemical... pointed out all the advantages of being able to print postage as you needed it, directly on the envelope, for any kind of mail or on a tape for parcel post... with a dated postmark... and have the envelope sealed at the same time.

I stressed the efficiency of meter

mailing, the time and effort saved... the convenience of always having postage in the meter—safe from loss, damage, borrowing... The automatic postage accounting... how metered mail skips cancelling and postmarking in the P.O.

She was pleasant, but tough with three g's... Their present method of mailing was satisfactory... and her girls could handle it—weren't overworked. No efficient office had stamp shortages! ... And thanks for calling... so much!

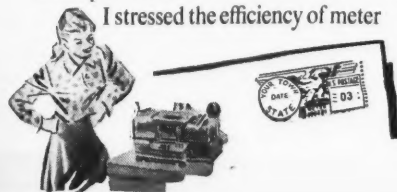
WELL, AT 8:06 PM CST, with hair mussed, her hat over one ear, lipstick smeared, close to tears, Smartypants was in a bad way.

It seems Smart Chemical let the help out early, on account of the snow... And about 5:15 PM, the sales manager phoned from New York, wanted the new January 1 price list sent out right away—because the big storm might delay delivery of the mail.

So all by her lonesome Miss P. had to insert and mail 700 price lists—and ran out of stamps! There she was, stuck in the postoffice, with a lip split from licking envelope flaps, 150 still to go!... And an hour overdue on a dinner date with her fiancé, a Commander fresh out from Japan but leaving that night!... If I would take over, she would never again be without a postage meter!

Well, I licked her stamps—and me a salesman for postage meters!—while Hype stood by grinning. Next day, Miss P. calls me to come over and pick up the order. And before she left in June to marry the guy, she talked two other orders into my book!... Great gal—when she was on your side!

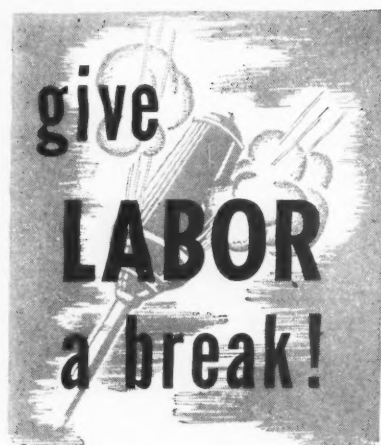
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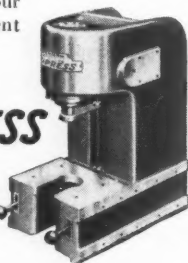




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sharply in most industries during the war years, especially toward the end of the period, and showed little tendency to return to its pre-war relative importance in the first two post-war years. Indirect labor costs are generally classified as fixed or semi-fixed charges. They are nevertheless, at least in part, more susceptible to management control than are direct labor costs, since many elements of indirect labor may be dispensed with at the discretion of management.

Indirect Labor Costs

To some extent, the unfavorable trend for indirect labor was due to influences beyond the control of management, but it is apparent that many labor cost elements which were subject to adjustment remained at high levels. The conclusion is inescapable that in numerous instances management was not forced to devote proper attention to the reduction of indirect labor charges because demand remained high regardless of price. It appears clear that, as cost competition becomes keener, it is especially in the area of indirect labor that we may expect substantial labor cost savings and real increases in overall productivity.

A second general characteristic of industrial productivity is that there are substantial differences in the relative levels of manufacturing efficiency in various segments of the same industry at any given time. In the low-cost, volume-production segments of an industry, cost competition has generally forced maximum efficiency in utilization of labor and in the techniques of production necessary for profitable operation in this area. In other segments of the same industries, where competition is on a quality or engineering basis, much less attention may be paid to maintaining a low level of man-hour requirements per unit, since labor cost is secondary to quality of product and customer satisfaction. It is obviously in such areas that the greatest relative gains may be expected during periods of stress.

The chart on page 21, showing labor requirements per dozen shirts in groups of plants classified by price line, clearly illustrates this effect. The gains recorded were achieved mainly by product standardization and simplification,

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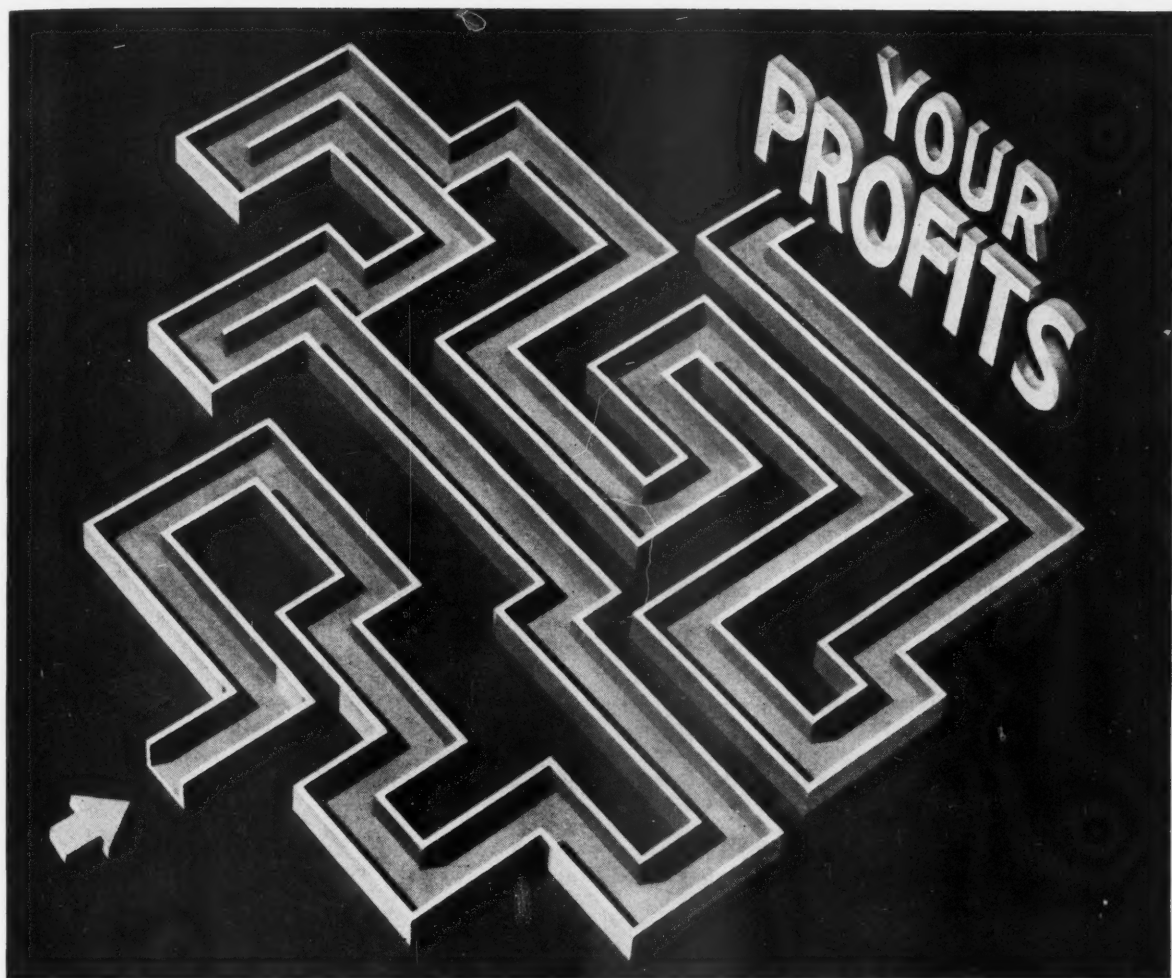
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by careful attention to improving worker efficiency, and without any significant technological improvement or increase in production volume.

Somewhat similar results are exhibited when firms are classified by differences in their production methods. Facilities which are already utilizing the most efficient production techniques are usually not in a position to make additional important short-term gains. The chart on page 21, which shows trends for groups of producers of men's dress shirts classified by production method, illustrates relationships typical of those found in other industries. Firms using mass-production methods for relatively standardization products (in the chart, the straight-line firms) showed a relatively slight reduction in man-hours per dozen during the period studied, although the averages were lower than for other producers throughout the period. Establishments using the combination and bundle systems, which have many of the characteristics of small-lot production methods, reported much more substantial gains, although the averages remained somewhat higher than for the line producers.

Keep Up with New Techniques

From the studies so far completed, it is clear that some producers tend regularly to devote attention to the maintenance of a high level of productive efficiency. Such firms quickly adopt new technological innovations, and make continuing changes in production methods and techniques. Other firms, however, fail to keep abreast of technological change, and make little effort to adapt their production environment to changing conditions. As a consequence, productive efficiency in these firms shows no improvement or may even decline over a period of years. Surprising variations in the trend of man-hours expended per unit may develop. In the chart on page 22 showing trends in man-hours expended per unit for two groups of industrial equipment producers, one group reported some improvement in machinery, equipment, or work methods during the period while the other group reported that no such changes had been effected. It will be noted that man-hours per unit for the former group declined during the years 1939 to 1945, while the latter group



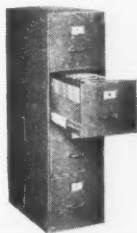
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To our Colleagues in American Business...

Here is another example of the fact that the cost of material per pound is not so significant as the cost of the finished part or product made out of it. In fact, judging material costs on a cents-per-pound basis may be completely misleading.

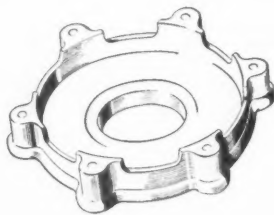
Revere during the war was asked by the government to apply its long experience with copper and brass to the manufacture of mill products in aluminum. It has remained in the aluminum business, making tubing, extruded shapes, and forgings. The latter naturally are custom-made to special designs. One of these seemed interesting to us, and the customer was asked if he would care to provide facts and figures that would show why he found it economical to choose an aluminum forging for this machine part.

He told us that he originally made this out of cast iron, which is, of course, an inexpensive material. An aluminum forging naturally costs more than an iron casting, in this case 5.2% extra. That would seem to be a big handicap to overcome, but a number of important savings when totaled together showed that this "costly" forging was actually saving considerable sums.

For example, the iron casting was $\frac{1}{8}$ inch oversize on top and bottom, to allow for machining; the aluminum forging is so accurate to dimensions that only $\frac{1}{32}$ inch is allowed for machining. This

means 75% less stock is removed when machining the two faces.

Machining cost is 75% less than on the iron casting, this figure including a loss of 10% of the castings due to defects uncovered by machining. Since the forging is dense and uniform, free from porosities, it is unnecessary to pressure-test it to make certain of its quality. This pressure test of the casting was an expensive process in terms of labor costs and time consumed. Doing away with it not only reduced costs but speeded up production.



When all the figures were in, it was found that this forging which was 5.2% more expensive actually cost 35.4% less as a finished part. And it was a better part, too, in every way.

If you are making or buying castings, Revere suggests that you investigate forgings. They have many structural advantages, and, as this example shows, may also offer economies. In fact, no matter what you make or buy, Revere recommends that you disregard the initial cost of materials. It may very well be that a more expensive material is less costly in the end and will not only save money but improve your product's appeal to your market. One final thought—suppliers to every industry will be delighted to collaborate with you in your studies of this subject. Why not call them in and add their knowledge to your own?

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showed a substantial increase during the same period. The divergences are due in part to the presence or absence of technological innovations, but probably to a greater degree they contrast the influence of progressive management which remained attentive to the problem of improving efficiency of operations with that of management which was less responsive to the difficulties of operating under the strain of wartime conditions. It is clear that lagging firms are heading for inevitable difficulty in attempting to compete on a cost basis with more efficiency-minded establishments.

Variation in Productivity

There is a surprising degree of variation in productivity between firms which are in direct competition with each other. A chart on page 22 shows the scatter of 153 shoe manufacturing establishments by man-hours expended per pair against factory price. At the same factory price, there is a general range between plants of about two to one in factory man-hours expended per pair produced. This range of variation between plants is not unusual, but may be found in a variety of industries. It will be noted that the factor of quality difference is presumably removed by comparing factories selling at the same average price level. The differences may be attributed in part to differences in quality of labor available at different plants or to differences in the type and amount of equipment utilized.

However, it seems highly probable that a large share of the variation represents differences in management's success in organizing and controlling internal production arrangements. The chart reveals the extent by which productivity might be improved if performance in the poorer plants were brought not to the level of the best but to the level of some of the better firms. Such an improvement would require no new discoveries but simply the use of techniques already applied elsewhere in the industry. A comparison of productivity level and trend in a single firm with the composite movement for all establishments in the industry or establishments with similar industrial characteristics should be an important guidepost for management planning.

It is the hope of the Bureau of Labor



Photograph taken in the Research Laboratories of Merck & Co., Inc., Rahway, N. J.

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Statistics that these productivity studies, besides revealing trends which to-day are of both national and international significance, will also become an important tool for direct use by management. Each study will have more than paid its way if a single firm is stimulated to improve productivity. The possibilities for improvement are legion, and the rewards are great. In the aggregate, the attention given to productivity in the individual establishments of the United States will have an important bearing on our national security.

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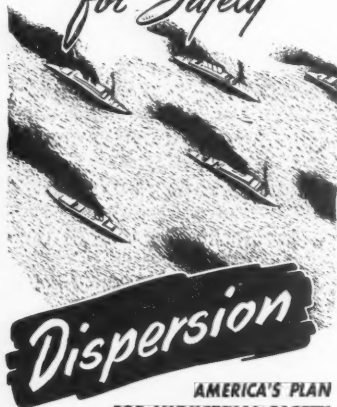
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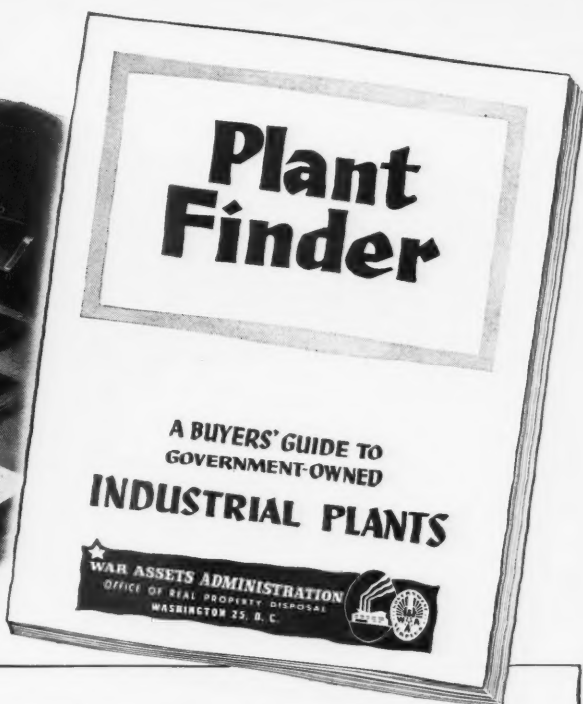
PROCESSING



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"That's what you say, but I'll bet other men aren't as hard on socks."

BUSINESS IN MOTION

To our Colleagues in American Business...

Here is another example of the fact that the cost of material per pound is not so significant as the cost of the finished part or product made out of it. In fact, judging material costs on a cents-per-pound basis may be completely misleading.

Revere during the war was asked by the government to apply its long experience with copper and brass to the manufacture of mill products in aluminum. It has remained in the aluminum business, making tubing, extruded shapes, and forgings. The latter naturally are custom-made to special designs. One of these seemed interesting to us, and the customer was asked if he would care to provide facts and figures that would show why he found it economical to choose an aluminum forging for this machine part.

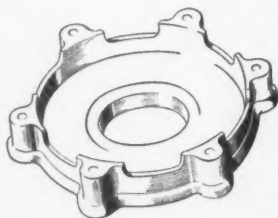
He told us that he originally made this out of cast iron, which is, of course, an inexpensive material. An aluminum forging naturally costs more than an iron casting, in this case 5.2% extra. That would seem to be a big handicap to overcome, but a number of important savings when totaled together showed that this "costly" forging was actually saving considerable sums.

For example, the iron casting was $\frac{1}{8}$ inch oversize on top and bottom, to allow for machining; the aluminum forging is so accurate to dimensions that only $\frac{1}{32}$ inch is allowed for machining. This

means 75% less stock is removed when machining the two faces.

Machining cost is 75% less than on the iron casting, this figure including a loss of 10% of the castings due to defects uncovered by machining. Since the forging is dense and uniform, free from porosities, it is unnecessary to pressure-test it to make certain of its quality. This pressure test of the casting was an expensive process in terms of labor costs and time consumed. Doing away with it not only reduced costs but speeded up production.

When all the figures were in, it was found that this forging which was 5.2% more expensive actually cost 35.4% less as a finished part. And it was a better part, too, in every way.



If you are making or buying castings, Revere suggests that you investigate forgings. They have many structural advantages, and, as this example shows, may also offer economies. In fact, no matter what you make or buy, Revere recommends that you disregard the initial cost of materials. It may very well be that a more expensive material is less costly in the end and will not only save money but improve your product's appeal to your market. One final thought — suppliers to every industry will be delighted to collaborate with you in your studies of this subject. Why not call them in and add their knowledge to your own?

REVERE COPPER AND BRASS INCORPORATED

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showed a substantial increase during the same period. The divergences are due in part to the presence or absence of technological innovations, but probably to a greater degree they contrast the influence of progressive management which remained attentive to the problem of improving efficiency of operations with that of management which was less responsive to the difficulties of operating under the strain of wartime conditions. It is clear that lagging firms are heading for inevitable difficulty in attempting to compete on a cost basis with more efficiency-minded establishments.

Variation in Productivity

There is a surprising degree of variation in productivity between firms which are in direct competition with each other. A chart on page 22 shows the scatter of 153 shoe manufacturing establishments by man-hours expended per pair against factory price. At the same factory price, there is a general range between plants of about two to one in factory man-hours expended per pair produced. This range of variation between plants is not unusual, but may be found in a variety of industries. It will be noted that the factor of quality difference is presumably removed by comparing factories selling at the same average price level. The differences may be attributed in part to differences in quality of labor available at different plants or to differences in the type and amount of equipment utilized.

However, it seems highly probable that a large share of the variation represents differences in management's success in organizing and controlling internal production arrangements. The chart reveals the extent by which productivity might be improved if performance in the poorer plants were brought not to the level of the best but to the level of some of the better firms. Such an improvement would require no new discoveries but simply the use of techniques already applied elsewhere in the industry. A comparison of productivity level and trend in a single firm with the composite movement for all establishments in the industry or establishments with similar industrial characteristics should be an important guidepost for management planning.

It is the hope of the Bureau of Labor



Photograph taken in the Research Laboratories of Merck & Co., Inc., Rahway, N. J.

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Statistics that these productivity studies, besides revealing trends which to-day are of both national and international significance, will also become an important tool for direct use by management. Each study will have more than paid its way if a single firm is stimulated to improve productivity. The possibilities for improvement are legion, and the rewards are great. In the aggregate, the attention given to productivity in the individual establishments of the United States will have an important bearing on our national security.

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